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MANUAL OF SUGGESTIONS

IN

FORM, DRAWING, AND COLOR

FOR THE

PUBLIC SCHOOLS OF THE STATE OF NEW YORK

BASED UPON THE OFFICIAL DOCUMENTS ISSUED BY THE BOARD OF REGENTS AND THE DEPARTMENT OF PUBLIC INSTRUCTION IN THE STATE OF NEW YORK

SPECIALLY ARRANGED TO MEET THE REQUIREMENTS
FOR REGENTS' AND UNIFORM EXAMINATIONS
IN THESE SUBJECTS

BY

ELISA A. SARGENT

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PREFACE.

THE following pages cover the general features of the work which forms the basis of : —

a. The Regents' Examination in Form Study and Drawing for the First Year Academic Certificate and the Second Year Academic Certificate, as given in the Regents' Bulletin No. 8, issued June, 1895.

b. The Uniform Examinations in Form, Drawing, and Color for Training Class, Third, Second, and First Grade, and Special Drawing Certificates, as given in the Syllabus of Drawing, issued by the Department of Public Instruction in 1896.

The courses of study in Form Drawing and Color laid out in the text-books of the Prang Educational Company cover fully, clearly, and practically all the requirements both of the Regents and of the State Departments. The general method of The Prang Courses is that of modern progressive educational thought — "learning to do by doing," under wise guidance. The Prang text-books so arrange and present the lessons, that pupils learn through actual experience in various interesting, correlated lines of work, to deduce definitely and correctly the technical principles underlying that work. The resulting grasp of the necessary technical principles is found to be thoroughly satisfactory, both when judged by the general standards of Art Education and when submitted to the special, official tests of the Regents and of the Department of Public Instruction.

It is the object of this publication to show the sequence of the requirements both of the Department of Regents and the Department of Public Instruction, and to indicate in definite detail to the schools using the Prang text-books and materials how to use these text-books and materials so as to fully meet these requirements.

The requirements for the Regents' examination, and such matter as is taken from the requirements of the Department of Public Instruction, are given precisely in the words of the official syllabi,[1] and the principles called for are illustrated by various examples; references are given to show where these principles are fully illustrated by definite, practical work in the Prang drawing books, manuals, and other publications.

[1] In Roman type.

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CONTENTS.

PAGE

PREFACE iii

INTRODUCTION 1–6

SUGGESTIONS FOR PREPARATIONS FOR REGENTS' EXAMINATIONS.

GENERAL STATEMENT OF REGENTS' REQUIREMENTS 9–12

REQUIREMENTS FOR FIRST YEAR ACADEMIC CERTIFICATE —

A. REPRESENTATION, OR PICTORIAL DRAWING.

1. Pictorial Drawing. 2. Light and Shade. 3. Theoretic Perspective. 4. Pictorial Drawing of Types of Form. 5. Drawing of Objects Resembling Types of Form. 6. Examples of Pictorial Drawings of Objects Resembling the Types of Form. 7. Materials for Teaching Pictorial Drawing 13–28

B. DECORATION, OR DECORATIVE DESIGN.

1. Description of Decorative Drawings. 2. General Principles of Decorative Design. 3. Requirements in and Examples of Historic Ornament, — Egyptian, Greek, Roman, Byzantine, Romanesque, Saracenic, and Gothic Styles. 4. Laws of Decorative Arrangement. 5. Materials for Teaching Decorative Design 29–47

C. CONSTRUCTION, OR GEOMETRIC AND WORKING DRAWINGS.

1. Instruments and Their Use. 2. Geometric Constructions. 3. Geometric Design. 4. Working Drawings. 5. Requirements. 6. Examples to Illustrate Requirements. 7. Materials for Teaching Working Drawings 48–65

SUGGESTED COURSE TO PREPARE FOR THE EXAMINATION FOR THE FIRST YEAR ACADEMIC CERTIFICATE 66–67

PAGE

Requirements for Second Year Academic Certificate —

A. Representation, or Pictorial Drawing.

1. Freehand Drawing, — Grouping, or Composition. 2. Instrumental Drawing, — Mechanical Perspective. 3. Materials for Teaching Freehand and Instrumental Perspective 70–83

B. Decoration, or Decorative Design.

1. Requirements in Decorative Design. 2. Requirements in and Descriptions and Examples of the Styles of Historic Ornament, including the Egyptian, Greek, Roman, Byzantine, Romanesque, Saracenic, Gothic, and Renaissance Styles. 3. Materials for Teaching Decorative Design 84–109

C. Construction, or Geometric and Working Drawings.

1. Geometric and Working Drawings. 2. Surface Developments and Patterns. 3. Isometric Projection. 4. Materials for Teaching Geometric and Working Drawings 110–117

Suggested Course to Prepare for the Second Year Academic Certificate 118–119

SUGGESTIONS FOR PREPARATION FOR UNIFORM EXAMINATIONS.

Introduction 123

General Statement of Requirements —

A. Requirements in Color.

1. The Value of Color Study. 2. Classification of Colors. 3. Tones of Colors. 4. Color Harmony. 5. Materials for Teaching Color . 124–130

B. Requirements in Projection 131

C. Requirements in Theoretic Perspective . . . 131

D. Suggestions for Illustrative Drawing.

1. Subjects from Nature. 2. Historic Houses. 3. Illustration of Poems and Stories. 4. Materials for Teaching Illustrative Drawing . 132–136

Suggestions for Preparation for Examinations 137

Suggested Course to Prepare for First Grade Examination . . 138

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INTRODUCTION.

In order to make the contents of this work on the subject of Drawing in the State of New York better understood, not only by those who will use it under the requirements of the State Departments, but also by those who are desirous of passing examinations in this subject in other States, it seems best to set forth clearly the conditions under which the Syllabi of Drawing issued by the Department of Regents and by the Department of Public Instruction are made, to state the limitations as to time, etc., imposed by these departments upon candidates for examinations, and to show in what way materials may be used and courses of study adjusted so as to aid in the carrying of the required work to the desired end.

THE PURPOSE AND MEANING OF THE SYLLABI OF DRAWING ISSUED BY THE DEPARTMENT OF REGENTS AND THE DEPARTMENT OF PUBLIC INSTRUCTION IN THE STATE OF NEW YORK.

Syllabus from the Department of Regents. — On page 272 of the Regents' Bulletin, No. 8, we read: —

"This detailed syllabus was prepared to indicate definitely the scope and character of the examinations in the several subjects."

This clearly states the purpose of the syllabi in all the subjects, and the syllabus of drawing given in this Bulletin may, therefore, be taken to be a statement of *what will be required* in the Regents' Examinations in this subject.

Syllabus from the Department of Public Instruction. — In the preface of the pamphlet issued by the Department of Public Instruction called "Drawing for Use in Teachers' Institutes and Training Classes," the statement of the purpose of this syllabus of work is: —

"The following lessons in drawing are intended as a guide for use in teachers' training classes and teachers' institutes throughout the State. They are designed to present in order the most important elementary principles underlying the study of the subject to those who are preparing to teach."

This plainly states that the matter included in the pamphlet is a *guide* or *course of study* to be followed in the classes and institutes named, in order that the students of those classes and the teachers attending the institutes may pass the Uniform Examinations in the subject of drawing prescribed by the Department of Public Instruction. Its purpose is, therefore, made clear, — it is a definite plan to be followed in the instruction of students and of teachers, and is the course of study on which the examinations will be based.

Comparison of the two Syllabi of Drawing as to their Purpose and Meaning. — This difference of purpose in the two syllabi is due to the difference in the relation of the two departments to the schools of the State. The Department of Regents is an examining, but not an instructing, body; the Department of Public Instruction is both an examining and an instructing body; — the Department of Regents deals with the students in the grammar and high schools of the State for the purpose of lifting the educational standards of these schools; the Department of Public Instruction deals with the teachers of the state for the purpose of prescribing the standards of admission into the teaching force, in order that educational standards may be regulated by this department through the State corps of teachers. The purpose and meaning of the Regents' Syllabus of Drawing must, therefore, differ from that of the Department of Public Instruction, in that the former is only indicative of the trend and scope of the examinations, while the latter is a positive requirement of preparation as well as a basis for examinations.

LATITUDE IN COURSES OF STUDY AND MATERIALS FOR USE IN THE PREPARATION OF STUDENTS TO MEET EXAMINATIONS.

On page 272 of the Regents' Bulletin, No. 8, it is stated: —

"The outlines of work given in this syllabus are not designed to prevent necessary freedom and flexibility in the arrangement of courses of study for New York secondary schools. The plan of alternative questions and the selection of broad but fundamental topics reduce to a minimum the chance of failure in the case of any student with an adequate preparation."

The Regents' Syllabus of Drawing *states the broad principles of the subject and also states the particular points upon which pupils may expect to be examined.* The Department of Public Instruction, using its special privileges as an instructing body, sketches in its syllabus of drawing *a course of study as a basis for instruction and examination in such classes and bodies as come directly under its control.*

From the above statements in the Regents' Bulletin it will be seen that any text-books in the subject of drawing, that will meet the requirements of the Regents' Syllabus in this subject, may form a basis of instruction for Regents' Examinations. The syllabus of drawing issued by the Department of Public Instruction holds itself as a guide for the preparation of classes to meet the Uniform Examinations, and refers to the Regents' Syllabus of Drawing as a completion of the course of study it sketches.

In the preface of "Drawing for Use in Teachers' Institutes and Training Classes," the following statement is found: —

"For the treatment of advanced drawing, decoration, historic ornament, and a more elaborate presentation of pictorial drawing, the teachers are referred to the Regents' Syllabus."

Any books, therefore, that will meet the requirements of this guide or course of study and the requirements of the Regents' Syllabus in drawing will be valuable aids in the carrying out of the course in drawing for Uniform Examinations.

PREPARATION OF STUDENTS TO MEET THE REQUIREMENTS OF THE REGENTS' AND UNIFORM EXAMINATIONS.

The matter of haste in the taking up of the work in drawing either for direct preparation for the Regents' or for the Uniform Examinations is a thing to be carefully considered both from the standpoint of justice to pupils and that of loyalty to the demands of the State Departments. The taking up of Elementary and sometimes Advanced Drawing in pre-academic years in the school course, and taking the drawing for the Training Class Certificate in the *first high school year*, often lead to discouragement and to a want of appreciation of the subject either as to its direct benefits to the students or as to its importance as an educational factor. The shortening of the required course of one hundred lessons for the preparation of students to meet either of the Regents' examinations in drawing (Bulletin No. 8, page 438, Group 5, — drawing a *two-count subject*, or a subject which is to receive five lessons a week for twenty weeks) is also a source of anxiety and of final discouragement to teachers and pupils, and often of a feeling of unjust antagonism to the examining body.

The statements in the Regents' Bulletin concerning the period of preparation for, and the time for the taking of examinations in, drawing seem sufficiently definite not to be misunderstood. In Bulletin No. 8, page 271, will be found the statement: —

"It is purposed in the preparation of these questions to keep in view what may fairly be expected from *students in academies*, and not to go beyond what their age and opportunities will warrant."

On page 273 of the Bulletin, referring to the Eight-year Elementary Course, which places Elementary Drawing in the first and Advanced Drawing in the second academic year, this statement is made: —

"This classification, however, shows the degree of maturity expected of candidates for the examination in each study, and is intended as a guide for both those who issue the questions and for those by whom the questions are to be answered."

The Bulletin further states, on page 279, as if to emphasize the preceding points: —

"It is highly probable, therefore, at the next revision (of the Syllabus) drawing *will be included* in the subjects of examination for the *preliminary certificate.*"

In other words, the Regents' examinations in drawing will be prepared for academic pupils of the first and second years, and it should not be expected that for less mature pupils (of the two highest grammar grades) a diminution of requirement will be made to meet their lack of growth in judgment, or lack of preparation because of haste to advance in the school course more rapidly than is indicated by the State requirements.

The Bulletin also states, on page 279, as another species of check: —

"All academic tests will be within the limits of the syllabus, and will be based on what may properly be expected from academic students after they have had instruction for the time assigned in the courses of study."

This strengthens the foregoing statements by adding a caution, as it were, against limiting the time of actual preparation.

The above statements show conclusively that the Department of Regents places drawing with the academic subjects and does not now require it in the preparatory work of the grammar grades. It is also quite definite as to the amount of time to be spent in the study of the subject. Drawing is, therefore, so far as Regents' Examinations go, distinctly an *academic subject*, and a subject for which a special allowance of time should be made.

To conclude, on page 437 of the Bulletin this statement may be found: —

"Principals should not form classes in advanced subjects with immature pupils."

As stated before, the taking of the work in drawing, preparatory to examinations, at too early a period and for too short a time has been the cause of most of the discomfort attendant upon failures not only in

Regents' Examinations, but also in all the other examinations in drawing of the State. It would seem to be the duty, therefore, of any one interested in the proper preparation of students of any class to urge that the work in drawing be taken in such years and for such periods as the Department of Regents or the Department of Public Instruction may require.

PLAN OF THIS WORK ON THE REGENTS' AND UNIFORM EXAMINATIONS.

In the following pages the attempt has been made to take up each subject presented in the Syllabi of Drawing issued by the Department of Regents and the Department of Public Instruction, to illustrate the meaning of each technical point presented, to indicate where further illustrations of these points may be found, to suggest lists of books which will be helpful to teachers in presenting the work of the syllabi to pupils, and to suggest courses of study the following of which will lead to desired ends in the preparation of students to meet the examinations of either department.

A careful study of the requirements of the two departments shows: first, — that a reasonable course of study in drawing below the academic grades, supplemented in the first and second academic years by the number of lessons required by the Regents as a review of the ground already covered, and with some additional points in projection and in theoretic perspective, should adequately prepare for the Regents' Examinations; second, — that the same course of study below the academic grades, followed by the work required by the Regents, and supplemented by special points in projection, theoretic perspective, and color, will adequately prepare for the Uniform Examinations.

It is the purpose of the following pages to so explain and illustrate the technical matter of the two State Syllabi of Drawing as to be able to make clear the fact that it is only necessary to teach clearly the points presented in these syllabi by any well approved method in order to prepare students to meet the State requirements in drawing with reasonable security as to the results.

SUGGESTIONS

FOR THE

PREPARATION OF HIGH SCHOOL STUDENTS TO MEET THE REGENTS' EXAMINATIONS IN FORM STUDY AND DRAWING

FOR

FIRST AND SECOND YEAR ACADEMIC CERTIFICATES

BASED ON THE SYLLABUS OF DRAWING IN BULLETIN No. 8, ISSUED BY THE DEPARTMENT OF REGENTS IN THE STATE OF NEW YORK, JUNE, 1895

"This detailed syllabus was prepared to indicate definitely the scope and character of the examinations in the several subjects. . . . It is not designed to interfere with that freedom and flexibility which ought to exist in a system of instruction so extended as that conducted in the academies of the state; but only to specify, with such exactness as may be practicable, the subjects and the extent in each subject for which the candidates in these examinations will be held responsible. It is understood that *the restrictions laid down in the syllabus are intended as well for those who prepare and issue the questions as for those who are to be called on to answer them.* It is purposed in the preparation of these questions to keep in view what may be fairly expected from students in academies, and not to go beyond what their age and opportunities will warrant."—***Bulletin No. 8,*** page 271.

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GENERAL STATEMENT

OF THE

REGENTS' REQUIREMENTS IN FORM STUDY AND DRAWING FOR BOTH FIRST AND SECOND YEAR ACADEMIC CERTIFICATES.

Introductory note. — The following statements and requirements are taken from ***Examination Bulletin No. 8***, issued by the Department of Regents in the State of New York, in June, 1895. The illustrations of principles are taken from ***The Prang Drawing Books and Manuals.***

Throughout the body of this work the matter in Roman type is taken from the ***Examination Bulletin*** of the Department of Regents in New York State. The matter in italics is inserted either in explanation of the illustrations or in a fuller explanation of the subject matter as presented in the ***Examination Bulletin*** or in the ***Syllabus of Drawing.***

GENERAL STATEMENTS AS TO REGENTS' REQUIREMENTS.

Attention of teachers and candidates is directed to the following suggestions and outline of requirements.

NOTE. — The "outline of requirements" will be found under the heads of REQUIREMENTS FOR FIRST YEAR ACADEMIC CERTIFICATE and REQUIREMENTS FOR SECOND YEAR ACADEMIC CERTIFICATE.

The first examination in drawing will presuppose at least twenty weeks of academic instruction. The second examination will presuppose an additional twenty weeks of academic instruction. — *See page 422 of* ***Bulletin No. 8.***

General suggestions. — Drawing is primarily a means of expression. Satisfactory results cannot be expected if the practice in drawing is confined to the drawing class. Like writing, it should be applied generally in the school work wherever an opportunity is offered, and abundant

material may be found in almost every subject. Scenes described in the reading lessons may be illustrated, cuts found in the geography and geology may be reproduced, plant forms may be drawn, the figures referred to in mathematics may be constructed, etc.

While the quality of line and finish of the picture depend on skill in execution, it must not be assumed that drawing is altogether a matter of manual training. The ability to represent by drawings depends in a large measure on the development of imagination, the power of carrying in mind a correct and vivid picture of the thing to be represented. This is specially true in industrial drawings, where the object represented is made from the drawing, not the drawing from the object. In this work the order of development is mental picture — the drawing — the object.

The study of the object is of course essential, but the student should also learn to draw without it. In all examinations models are to be removed from the sight of candidates.

The work is to be done on drawing paper 8 by 10 inches, and all drawings are to be made suitable in size to fill the spaces allowed. The paper should be placed with long edges from left to right, and answers under each division should be on separate sheets. The credits allowed each answer depend on (*a*) knowledge of principles, (*b*) execution.

The work here outlined requires to a great extent application of principles learned by study of type forms to objects in nature and in industrial construction. Special emphasis is placed on the necessity of giving careful attention to execution. Under this requirement power of expression will increase as the work progresses, and at the close of the course a high degree of excellence in execution will be expected.

As to method of execution, the drawings required will be: —

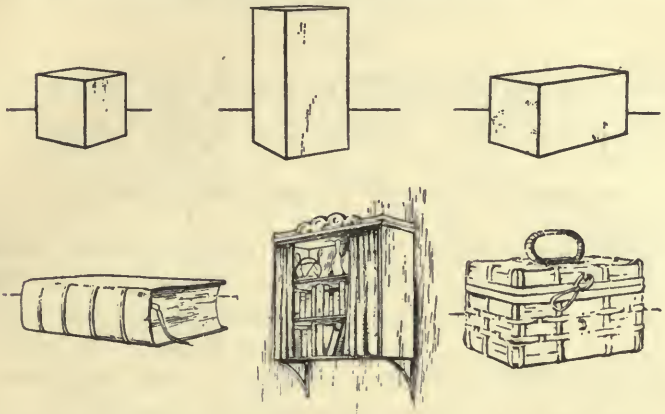
a. Freehand drawings, in which the pencil is guided by the hand alone.

b. Instrumental drawings, in which the pencil is accurately guided by mechanical means.

As to the aim, the drawings will be: —

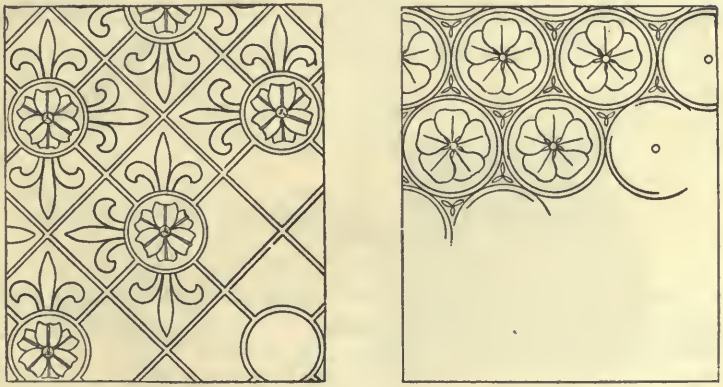
a. Pictorial drawings, or perspective, representation of the appearance of objects.

NOTE. — *The subject of mechanical or theoretic perspective is fully illustrated in the division of this work devoted to* ADVANCED DRAWING.



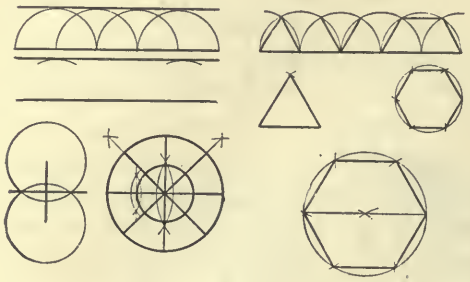
The pictorial drawings given above are found in **The Prang Complete Course, Manual Part III.**, *and in* **The Manual for The New Graded Course.**

b. Decorative drawings or ornamentation.

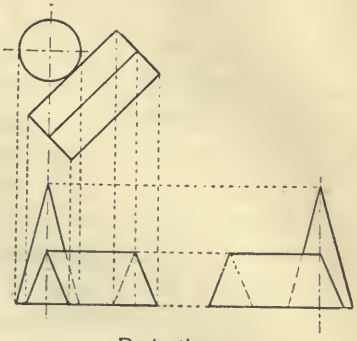


Examples of surface designs from conventionalized plant forms. The decorative designs given above are found in **The Prang Complete Course, Manual Part VII.**

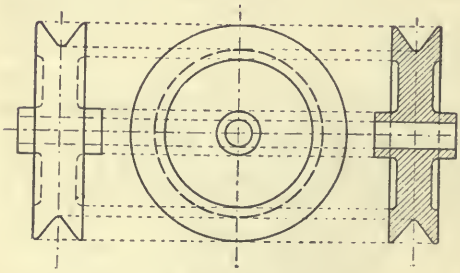
c. Geometric and working drawings, consisting of geometric constructions, projections, sections, and developed surfaces.



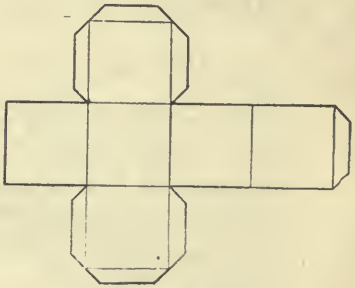
Geometric constructions.



Projections.



Views with section.



Developed surface.

The illustrations of geometric and working drawings given above are from ***The Prang Course in Art Education.***

NOTE. — *The preceding statements are general in character, and are, therefore, illustrated in a very general way. In the following pages the specific requirements for both Elementary and Advanced Drawing are fully stated and the illustrations are selected with a view to making the points presented clearly comprehended.*

REQUIREMENTS

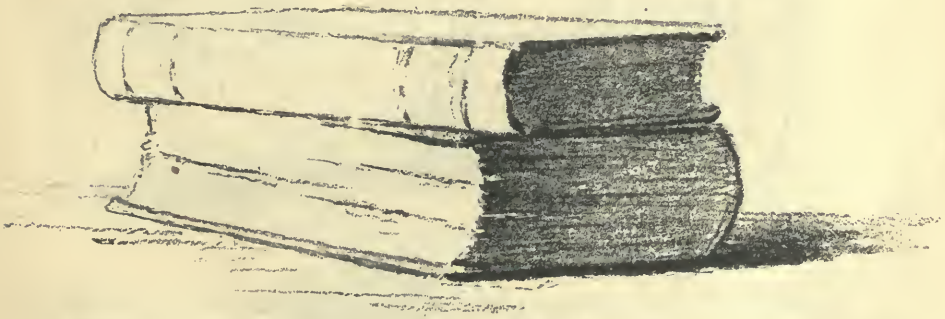
FOR THE

EXAMINATION IN ELEMENTARY DRAWING FOR THE FIRST YEAR ACADEMIC CERTIFICATE.

A. REPRESENTATION OR PICTORIAL DRAWING.

Pictorial drawings. — *Freehand and instrumental.* In this work the quality of line depends on the character of the object represented and the conditions under which it is seen. If it is near the observer, and has sharp, well defined edges, the lines should be well defined. If it has less sharply defined edges, or if it is remote from the observer or in shadow, its outlines should be represented by soft, broad, or broken lines. Contours of objects with smooth, even surfaces are indicated by even, narrow lines; irregular and rough surfaces by broader, softer, or broken lines. In all instrumental work the lines should be clear and well defined.

Light and shade. — In both freehand and instrumental work expression by light and shade may be required.



Example of rendering in light and shade. This drawing is from ***The Prang Complete Course, Book No. 8.***

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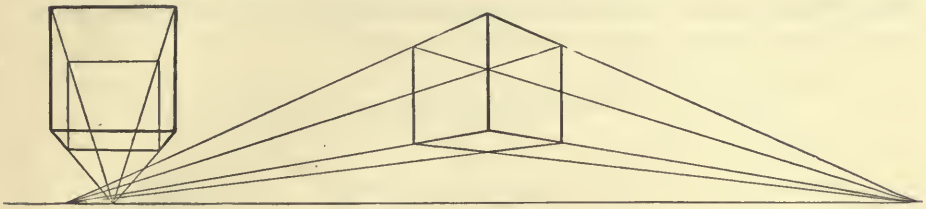
Theoretic perspective. — It is expected that students will be familiar with the following terms and principles of scientific perspective, and will be able to apply them both in freehand and in instrumental work: —

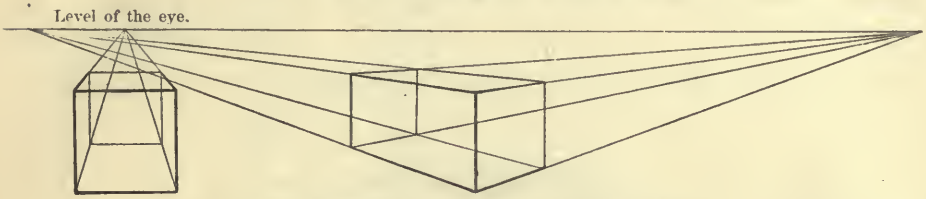
A perspective drawing is a representation of an object presenting the same appearance as the object itself. In a perspective drawing the object is conceived of as seen through a transparent plane called the picture plane. Straight lines are imagined running from all points of the object to the eye. The points where these lines pierce the picture plane are points of the perspective.

Illustration of the picture plane. The window answers to the assumed vertical plane on which the picture is to be drawn. The dotted lines show the imaginary lines running from all points of the object to the eye.

1. Position affects the apparent form of an object.



Above the eye — facing and turned at 45°.



Below the eye — facing and turned at 45°.

These drawings are from ***The Prang Course in Art Education.***

2. Distance affects the apparent size of an object; the further an object is from the eye, the smaller it will appear.

Illustration of apparent decrease in size with distance from the observer.

3. Lines parallel to the picture plane retain their direction in the perspective. Hence, vertical lines remain vertical, and horizontal lines parallel to the picture plane remain horizontal.

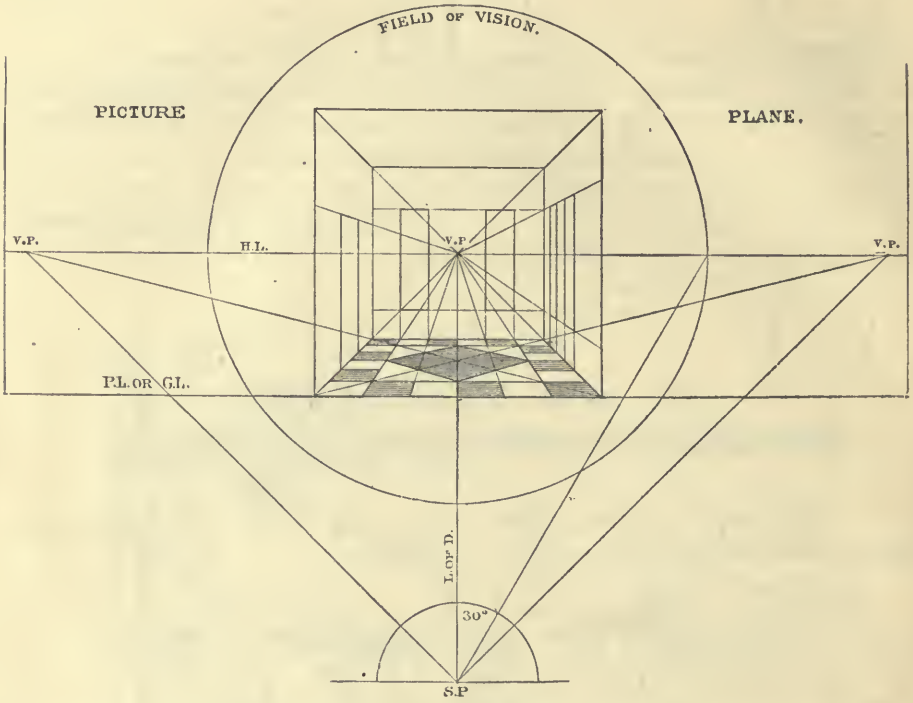


Diagram illustrating the picture plane, field of vision, etc., and showing how vertical lines and horizontal lines parallel to the picture plane retain their positions in perspective. From ***The Prang Complete Course, Manual Part IV.***

NOTE. — *This drawing is one of a complete series of drawings in mechanical or theoretic perspective which may be found in* **The American Text Books of Art Instruction, Revised Edition, Books XIII. and XIV.** *Further examples of this series of drawings will be found in the division of this work given to* ADVANCED DRAWING.

4. Lines not parallel to the picture plane appear to converge as they recede from the eye. The point toward which any set of parallel lines converges is called the vanishing point.

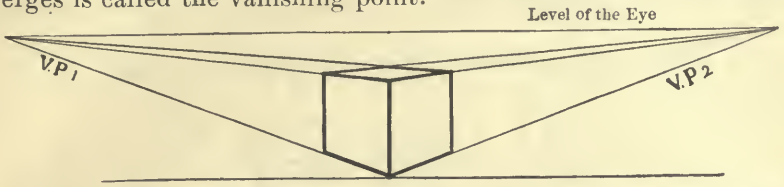


Diagram illustrating vanishing points at 45°. From ***The Prang Complete Course, Manual Part IV.***

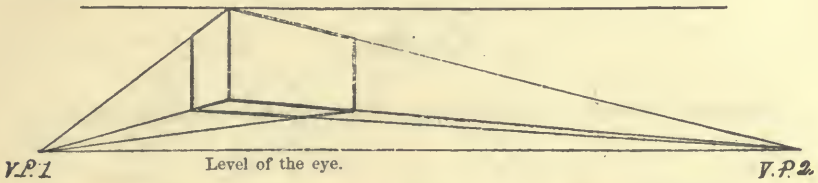


Diagram illustrating vanishing points at 30° and 60°. From ***The Prang Complete Course, Manual Part VI.***

5. All horizontal lines, not parallel to the picture plane, vanish at the level of the eye. Hence, those below the level of the eye slant upward; those above the level of the eye slant downward. *See cuts above.*

6. Lines perpendicular to the picture plane vanish at a point directly in front of the eye. This point is called the center of vision.

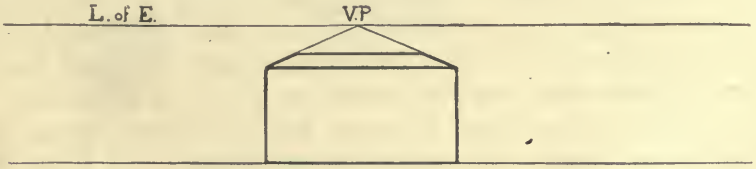


Diagram illustrating lines vanishing at the center of vision (V. P. *is at* C.V.). *From* ***The Prang Complete Course, Manual Part IV.***

7. All horizontals at an angle of 45° with the picture plane vanish in points at the right or left of the center of vision, and as far from it as the eye is from the picture plane.

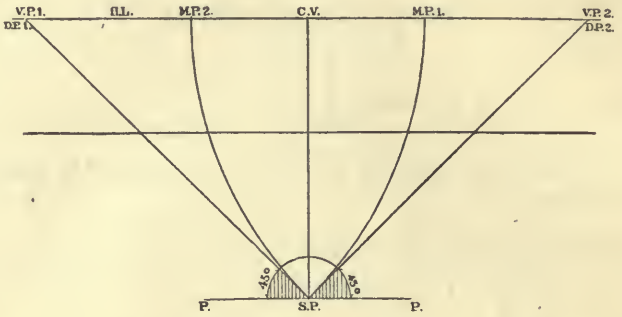


Diagram showing how vanishing points at 45° *are determined.*

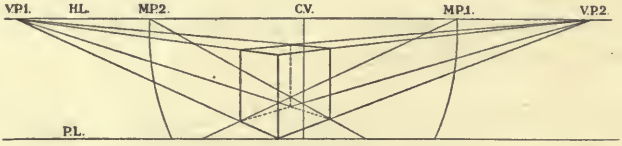


Diagram showing how horizontals at 45° *with the picture plane vanish.*

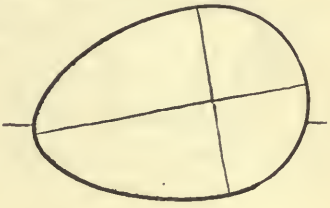
The above diagrams illustrate the method of representing horizontal lines vanishing at points equidistant from C.V. *(center of vision), and at the same distance from* C.V. *as the eye is from the picture plane. The line of direction (from* S.P. *or station point to* C.V.*) denotes the distance of the eye from* C.V. *The first diagram shows how the vanishing points* (V.P. 1 *and* 2) *and measuring points* (M.P. 1 *and* 2) *are placed when an object is to be drawn at* 45° *to the picture plane,—the second how the position and length of the horizontal lines which represent the horizontal edges of the cube are determined by the aid of the vanishing and measuring points.*

Types of form. — The examination will require drawings of : —

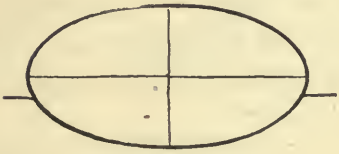
a. The following type solids : — Sphere, hemisphere, ovoid, spheroid (prolate and oblate), cylinder, circular plinth, and cone.

Sphere.

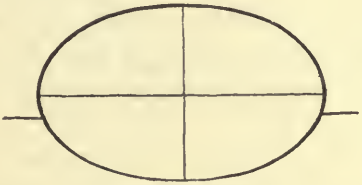
Hemisphere.



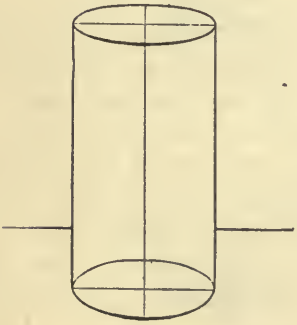
Ovoid.



Prolate spheroid.

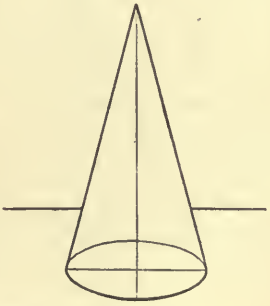


Oblate spheroid.



Cylinder.

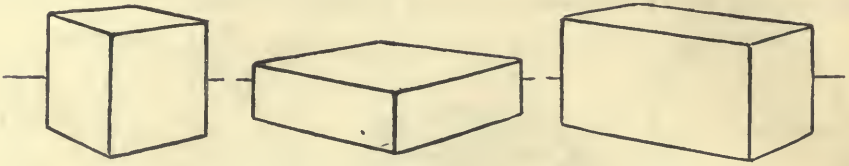
Circular plinth.



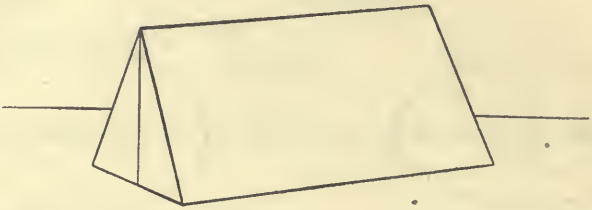
Cone.

NOTE. — *The type solids given above are to be considered in two groups, one with the sphere as a central type, the other with the cylinder as a central type. Relative dimensions are shown by diameters, etc., in each group.*

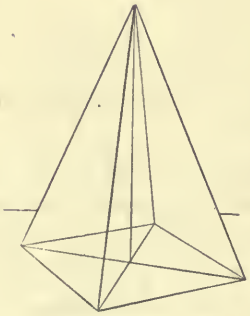
Cube, square prism, square plinth, triangular prism, square pyramid, vase form.



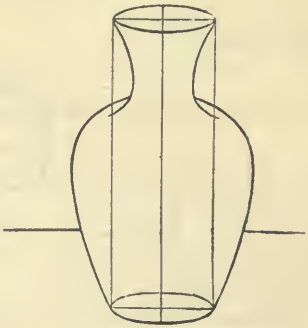
Cube. Square plinth. Square prism.



Triangular prism.



Square pyramid.



Vase form.

NOTE. — *The first three type solids given above and the square pyramid form a group with the square prism as a central type. The first four may be classed as prisms. The vase is a compound form.*

Objects resembling types of form.

b. Objects resembling a sphere and spheroids, as an apple, a peach, a turnip.

c. Objects having a general cylindric form, as a box, a fruit jar, a tumbler, a stovepipe, a hat.

d. Objects resembling the cone, as a carrot, a thimble, a beet.

e. Objects resembling the pyramid, as a spire, an inkstand.

f. Objects having a general rectangular outline, as a box, a table, a door, a house.

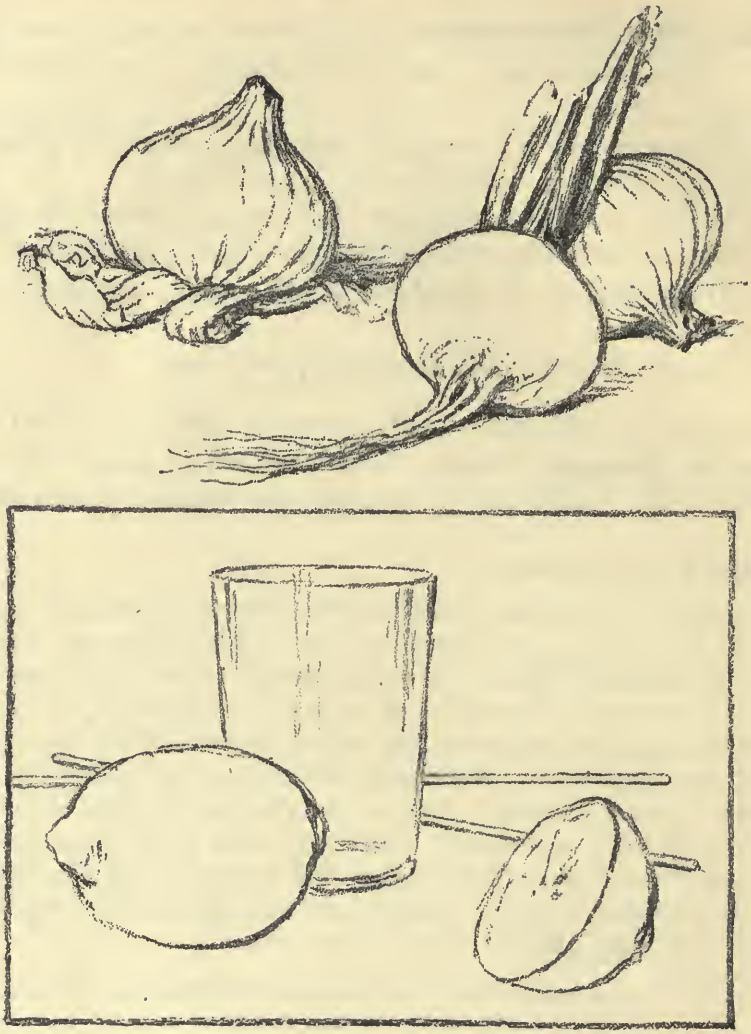
g. Leaves, flowers, trees, and other plant forms.

Although no statement is made concerning groups of objects in the ***Syllabus for Elementary Drawing,*** *the Department of Regents gives such drawings in the examination for the* ***First Year Academic Certificate.***

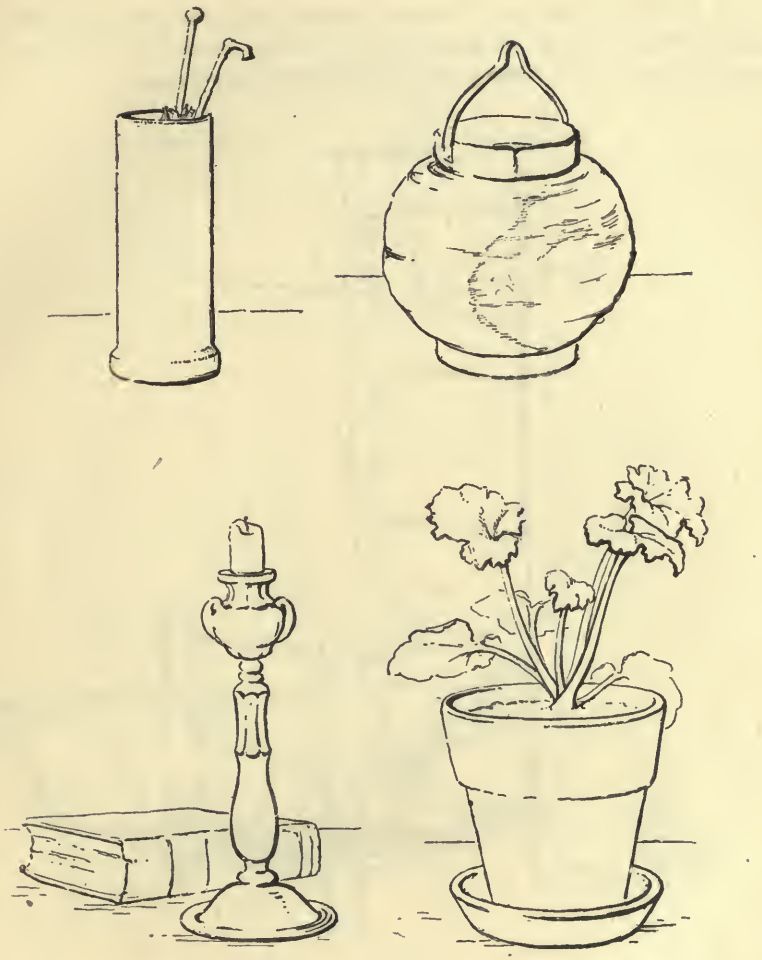
Examples of object drawing.

Examples of drawings of single objects, groups of objects, leaves, sprays, etc., will be found in the following pages. These drawings have been selected to illustrate the choice of objects through which both the interest of the pupils and their appreciation of the laws of perspective and the value of good drawing and good rendering may be secured. They have also been selected with a view to the possibilities of schoolrooms in the way of providing materials for such drawings, either within the room or from the windows. The Gate of Basle and Giotto's Tower are chosen as examples of historic architectural detail well worth copying both for the sake of association and for their architectural value. Longfellow's description of the latter adds to the appreciation gained by the study of the picture.

> "In the old Tuscan town stands Giotto's tower,
> The lily of Florence blossoming in stone, —
> A vision, a delight, and a desire, —
> The builder's perfect and centennial flower,
> That in the night of ages bloomed alone."

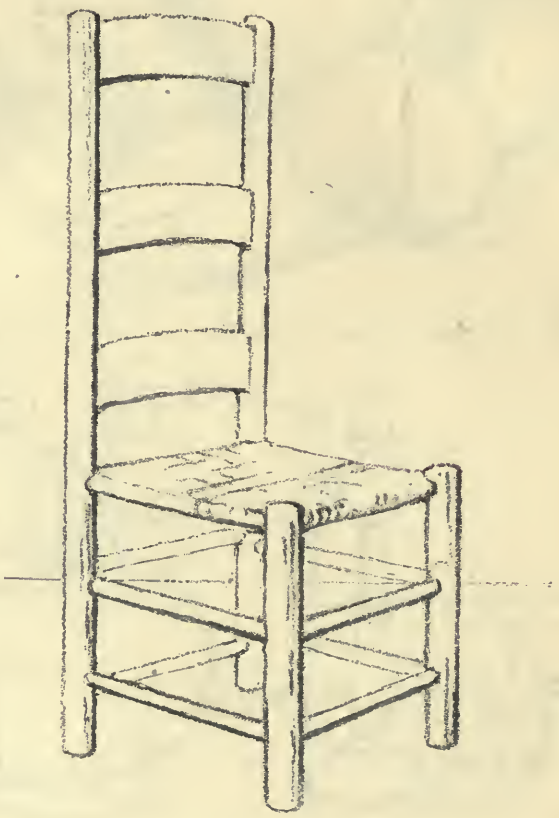


Examples of rendering groups of fruits, etc., in outline. From ***The Prang Elementary Course in Art Instruction, Books 1 and 3.***



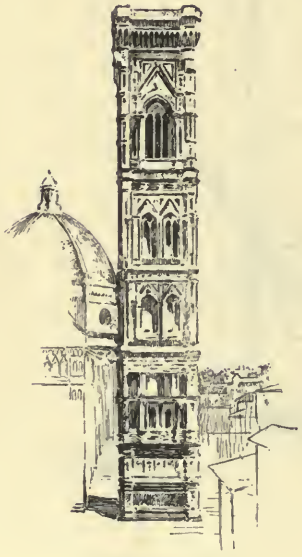
Examples of rendering simple objects based on the type forms, singly and grouped. From **The Prang Complete Course, Manual Part IV.**

"On its sturdy oaken legs it trudges diligently from one scene to another, and seems always to thrust itself in the way, with most benign complacency, whenever an historic personage happens to be looking round for a seat." — HAWTHORNE.



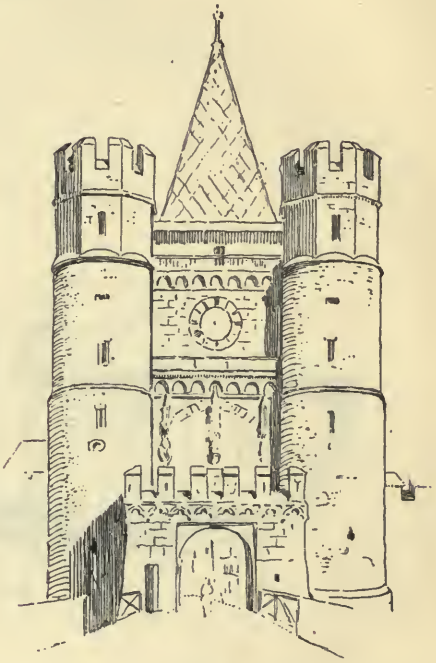
Example of an angular object rendered in outline. From ***The Prang Complete Course, Book No. 7.***

Examples of rendering in outline and in light and shade. From ***The Prang Complete Course, Book No. 7,*** *and* ***Manual Part IV.***



Giotto's Tower.

"The lily of Florence blossoming in stone."



The Old Gate of Basle.

Examples of rendering in outline and in light and shade — book and towers. From ***The Prang Complete Course, Manuals Parts III. and IV.***

UNIVERSITY OF CALIFORNIA

Examples of rendering branches. From ***The Prang Complete Course, Manual Part IV.***

BOOKS, MANUALS, AND MATERIALS FOR CARRYING OUT THE WORK IN REPRESENTATION OR PICTORIAL DRAWING.

Methods of instructing pupils in the foregoing work will be found under the head of REPRESENTATION *in either of the following sets of books:—*

1. THE PRANG COMPLETE COURSE, Books 1–10 inclusive, with the accompanying MANUALS.

2. THE PRANG NEW ELEMENTARY COURSE IN ART INSTRUCTION, Books 1–6 inclusive, together with THE PRANG COMPLETE COURSE, Books 7–10 inclusive, with the accompanying MANUALS.

3. THE PRANG COURSE IN DRAWING FOR GRADED SCHOOLS, Books 1–6 inclusive, together with THE PRANG COMPLETE COURSE, Books 9 and 10, with the accompanying MANUALS.

NOTE. — **Bartholomew's Sketches, Elementary Sets 1, 2, and 3,** will be found useful with either of the above sets of books, providing excellent material for gaining technical skill in representation by copying.

B. IN DECORATION OR DECORATIVE DESIGN.

Decorative drawings. — *Freehand and instrumental.* This subject deals with the application of form knowledge to the enrichment of surfaces of objects. The quality of line depends on the character of the drawing to be made.

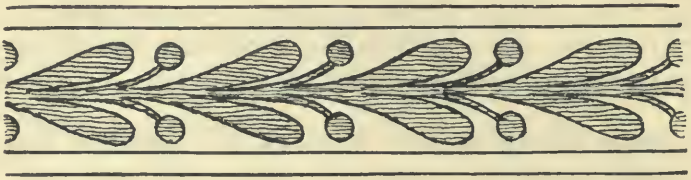
All designs for ornamentation belong to this department. A decorative design differs from a picture in that its purpose is to give pleasure by beautifying the object to which it is added, while the purpose of a picture is to give pleasure in itself.

In a picture the representation of the object in light and shade, with all the harmonizing accessories of composition of line, light and dark, etc., is the main thing. In a decorative treatment the composition of line, mass, and color is the chief element, while the representation is carefully kept. The drawing is true and spirited, but without the pictorial element and the modeling given by light and shade. The contrasts are not of light and shade, but of light and dark, or of light, dark, and middle tone, as will be seen in the accompanying examples. Everything is kept in flat effect, whether the work be in black and white, or in color.

Examples of decorative effects in light and dark, and an example of the application of ornament. From **The Prang Complete Course, Manual Part IV.**

Mechanical aids, such as rule, compasses, tracing and transferring, may be employed in decorative drawing. Tracing paper may be used, or the unit may be cut out and repeated by tracing with a sharp pencil.

Half-tinting sometimes adds to the beauty of a design. This may be either freehand or instrumental. In the former case a broken line is more pleasing.



Example of freehand half-tinting. From ***The American Text Books of Art Education, Revised Edition, Book 8.***

General Principles, etc., of Decorative Design: —

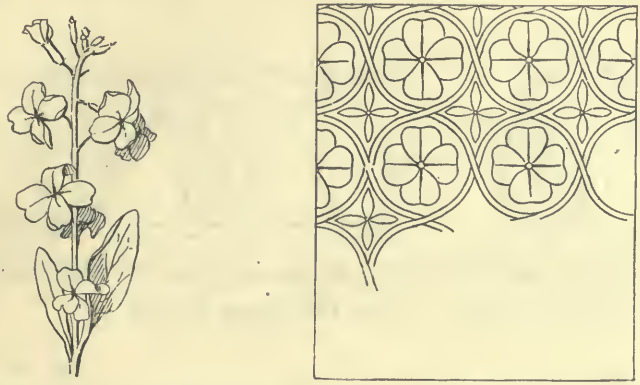
1. Fitness to purpose is the underlying principle of decoration.

2. That which is used as decoration should not be of more importance than the object decorated, and should not detract from the usefulness of that object.

3. A part repeated to form a design is called a unit of that design.

Example of a unit of a design, and of the use of the unit. From ***The Prang Elementary Course in Art Instruction, Book 1.***

4. Conventional treatments of natural forms may be used as units of design.



Example of the conventional treatment of a plant form and its use in a design. From ***The Prang Complete Course, Manual Part VII.***

5. Keeping the general characteristics of a natural form, omitting details and accidents of growth, is called conventionalization. (*See above.*)

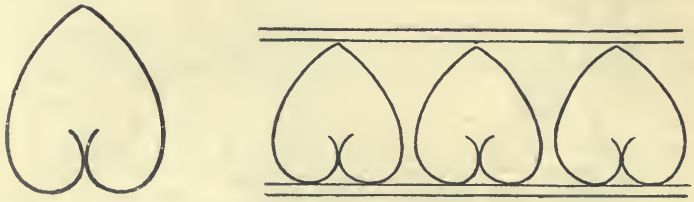
6. A unit of design may be repeated: —

a. About a center, forming a rosette or radial arrangement. In a rosette the units should spring from the center, and should be united at the center by a strong central figure.

b. In a line forming a border.

Examples of repetition around a center. From ***The Prang Complete Course, Manual Part III.***

In a border marginal lines should be used to give stability to the arrangement.



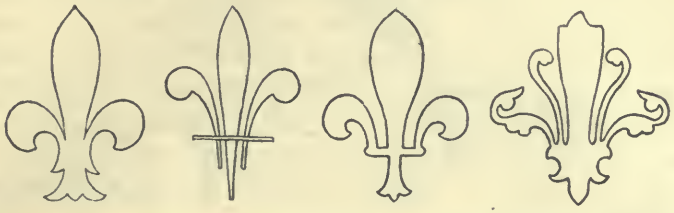
Example of a unit and its repetition in a border. The border gives an example of marginal lines. From ***The Prang Course.***

c. To cover a surface.

Example of the repetition of a unit to cover a surface. From ***The Prang Elementary Course in Art Instruction, Book 1.***

7. In a surface pattern or a border the unit repeated may be a bilateral form, or it may be a rosette or another figure.

8. A bilateral form is one having an axis of symmetry; that is, one which may be divided into two parts that balance.

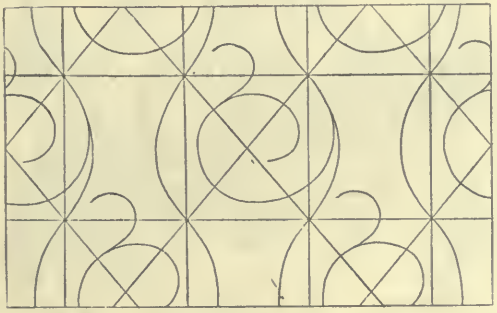


Examples of bilateral figures. From ***The Prang Complete Course, Manual Part III.***

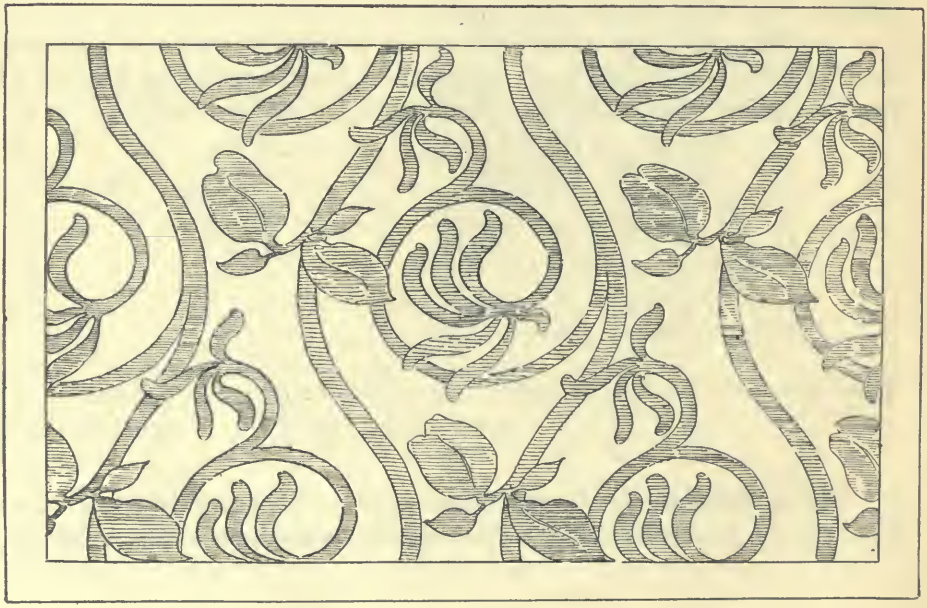
Elementary Design.

The sources of materials for decoration are *geometric figures* and *natural forms.* "All noble ornamentation is the expression of man's delight in God's work."

Any geometric figure may be used in decoration, simple or modified, to meet necessary conditions. In original design requiring the use of plant forms, care should be taken to observe the law of growth.



Example of the use of leading lines, suited to "laws of growth," as a preliminary step in a design. From ***The Prang Complete Course, Manual Part IV.***



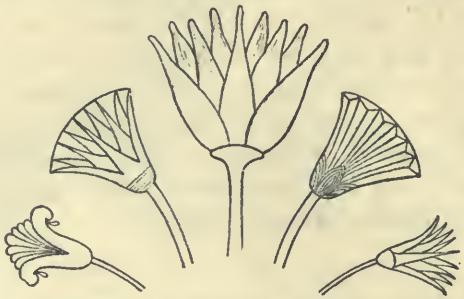
Design (on preceding page) showing the use of plant growth, with underlying leading lines. The three drawings, — the first of leading lines (p. 33), the second the honeysuckle, and the third a surface design from the honeysuckle (p. 34) laid out upon the leading lines of the first drawing, show a series of steps in making a design from a plant form. The leading lines are selected with a special view to the adaptability of the plant form, or to the "laws of growth" of the plant. The elements of the plant form are then arranged upon this foundation. The designs are taken from ***The Prang Complete Course, Manual Part IV.***

Historic Ornament.

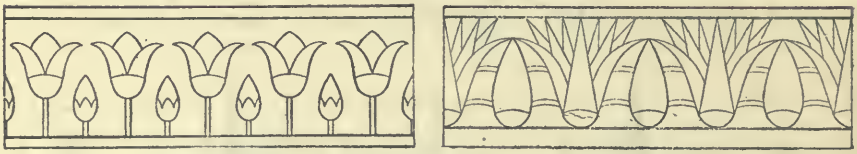
In historic ornament the work will be confined to reproductions of the units given in Plates 7–9 (*Regents' Bulletin*, No. 8), and to designs made from these units. (*See pp. 36–44.*) The units in historic ornament are either geometric figures or conventionalized natural forms.

Gable from the transept of Notre Dame, Paris.

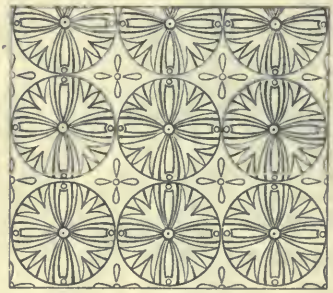
EXAMPLES OF EGYPTIAN ORNAMENT.



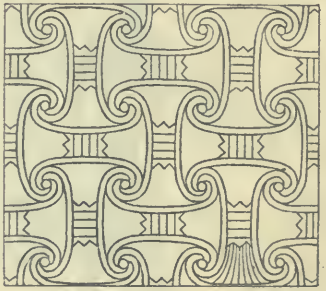
Natural and conventionalized lotus forms.



Borders of conventionalized lotus flowers and buds.



Surface covering of lotus forms.



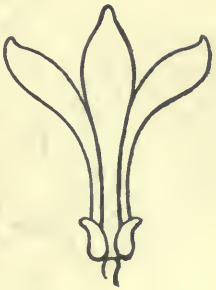
Surface covering with wave scroll.

From ***The Prang Complete Course, Manual Part IV.***

EXAMPLES OF GREEK ORNAMENT.

Egyptian lotus.
Prototype of Greek lily.

Greek anthemion.



Greek lily.

Wave scroll border.

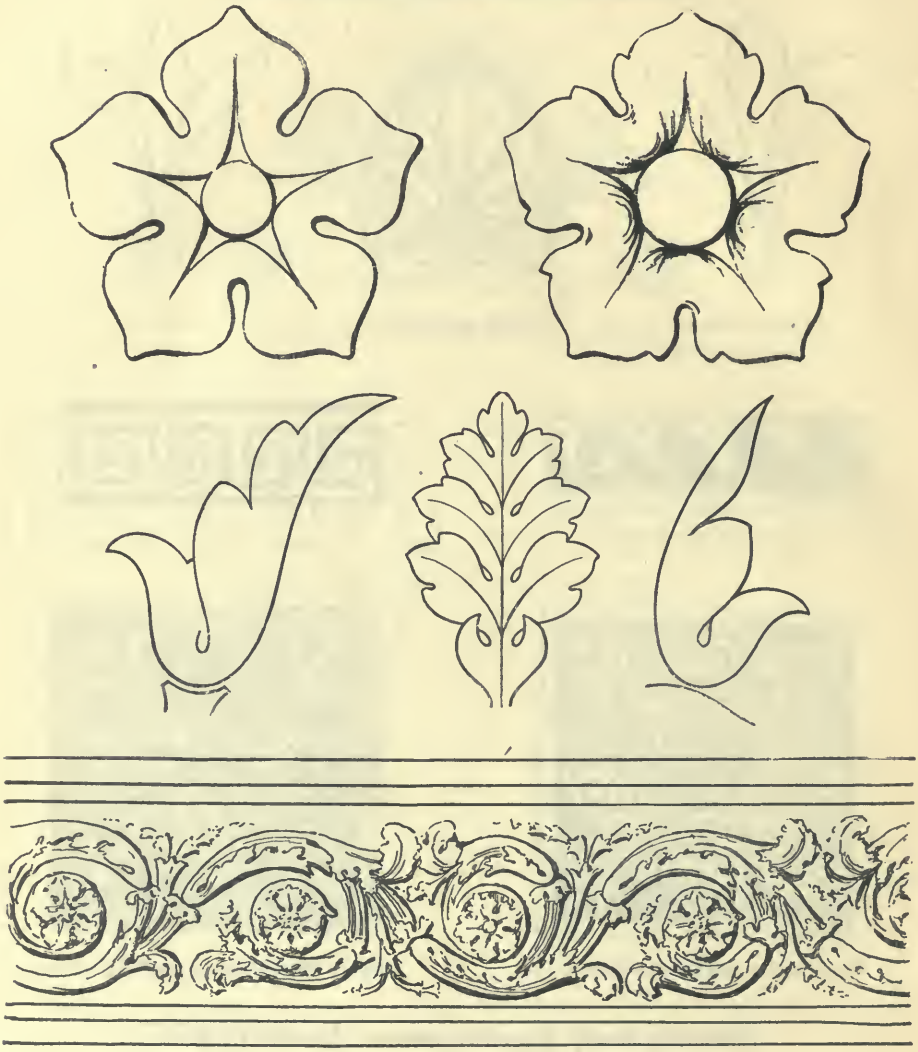
Fret.

Surface of anthemion forms.

Surface of anthemion and lily forms.

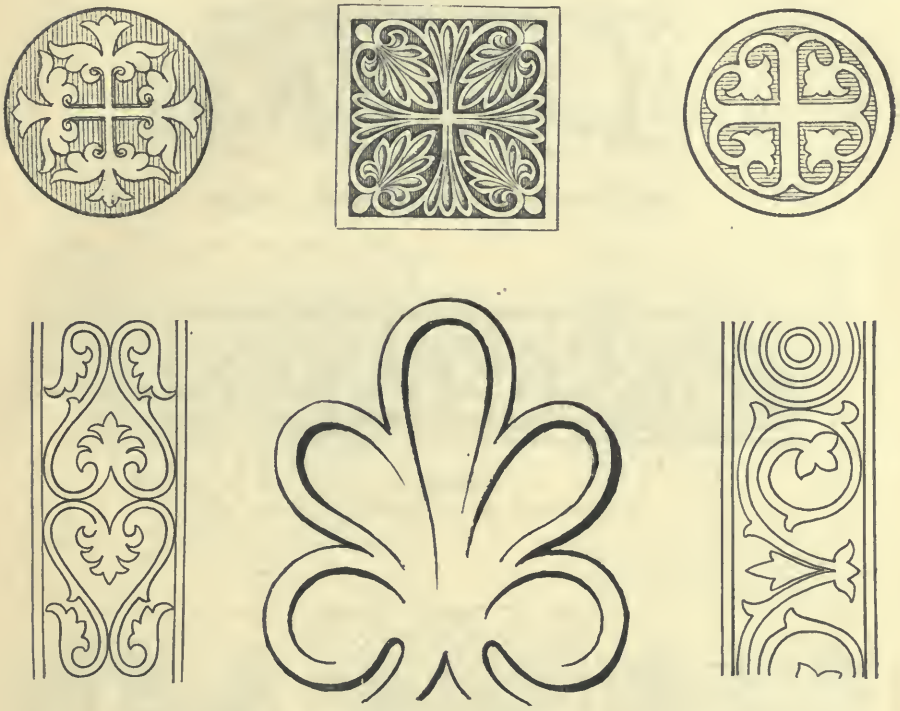
From ***The Prang Complete Course, Manual Part IV.***

EXAMPLES OF ROMAN ORNAMENT.



From ***The Prang Complete Course, Book 9,*** *and from* ***The American Text Books of Art Education, Book 9.***

EXAMPLES OF BYZANTINE AND ROMANESQUE ORNAMENT.



From a capital, XII. Century.

From ***The Prang Complete Course, Book 9.***

EXAMPLES OF SARACENIC ORNAMENT.

Characteristic units, especially known as Moorish.

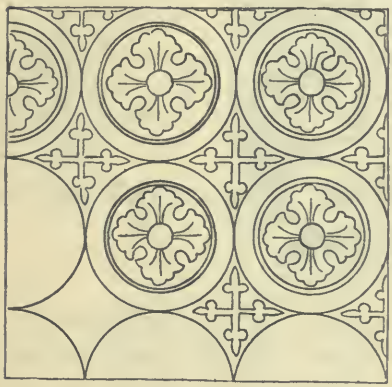
Interlacing.

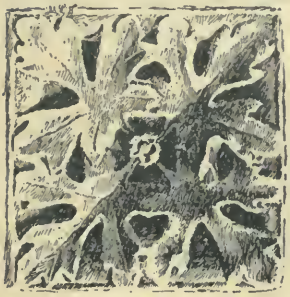
A characteristic feature of Saracenic ornament.

Surface designs.

From ***The Prang Complete Course, Manual Part II.*** *and* ***Book 10.***

EXAMPLES OF GOTHIC ORNAMENT.

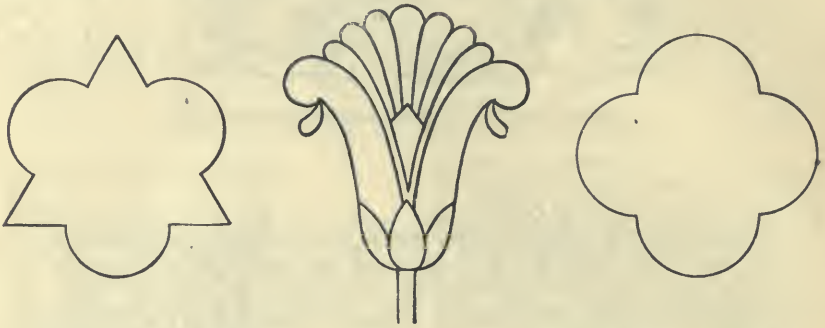




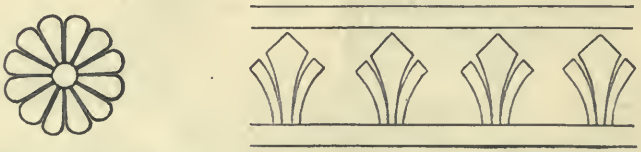
From ***The Prang Shorter Course Manual,*** *from* ***The Prang Complete Course, Book 9,*** *and* ***Manual Part II.,*** *and from* ***The Prang Course.***

Laws of Decorative Arrangement.

Satisfactory work in this department involves a careful study of the elementary principles of arrangement for decorative purposes, symmetry, repetition, and alternation.



Illustrations of **symmetry,** *or the balance of parts. From* ***The Prang Course in Art Education.***

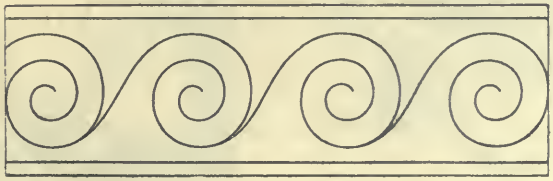


Illustrations of **repetition,** *— around a center and in a straight line. From* ***The Prang Course in Art Education.***

Illustrations of **alternation.** *From* ***The Prang Complete Course, Manual Part IV.***

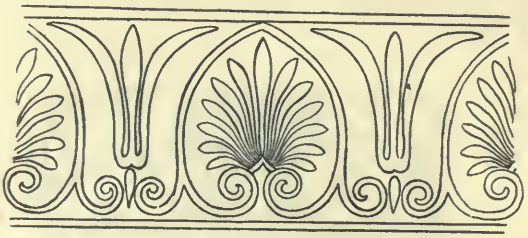
Students should also understand the principles of contrast, unity, strength, variety, rhythm, and repose. They should be able to make, from given units, simple geometric and floral designs for rosettes, borders, and surface patterns.

Examples of contrast, variety, *and* repose. *Fleur-de-lis*, contrast *in the arrangement of parts; Moorish surface pattern*, variety *in arrangement and in line; Greek lily*, repose. *From* ***The Prang Complete Course, Book 10,*** *and* ***The Prang Course in Art Education.***



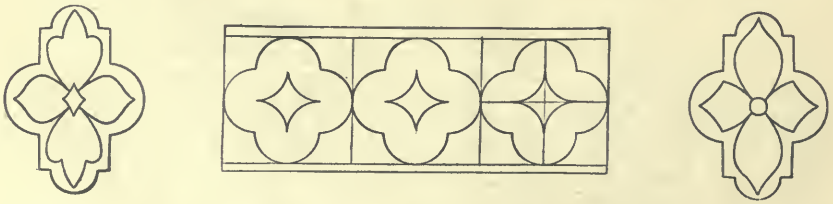
Example of rhythm — *the wave-scroll. From* ***The Prang Complete Course, Manual Part IV.***

Unity, *produced by the subordination of parts to the whole, is admirably shown in the Greek border given below.*

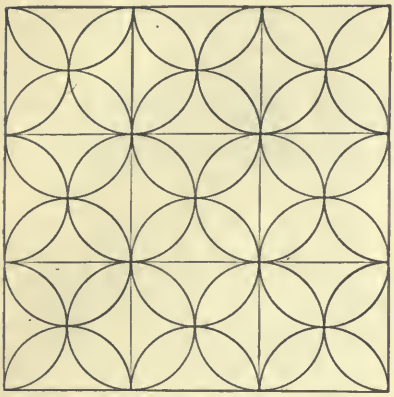


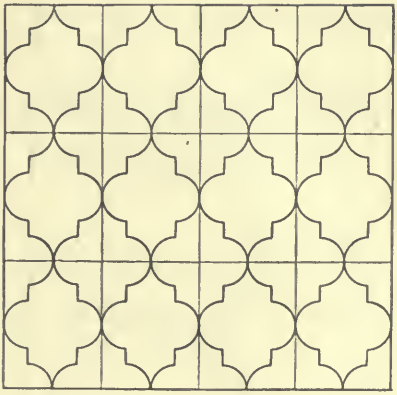
Example of **unity.** *From* ***The Prang Course,*** *and from* ***The Prang Complete Course, Manual Part IV.***

Example of **strength** *produced by the vigor of parts. From* ***The Prang Course in Art Education.***



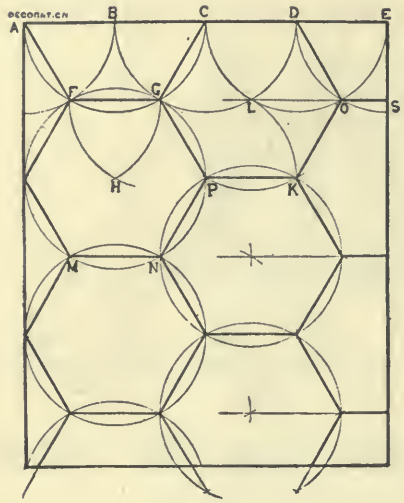
Examples of geometric design in figure and border. From ***The Prang Complete Course, Manual Part II.,*** *and from* ***The American Text Books of Art Education.***

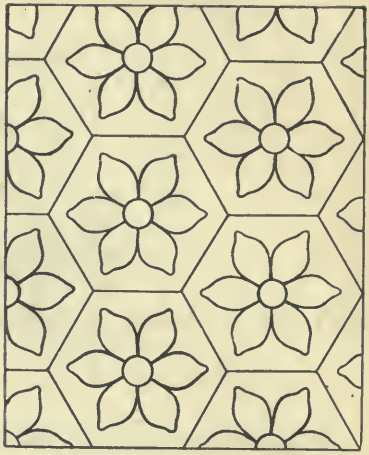




Examples of geometric design in surface covering. From ***The Prang Complete Course, Manual Part II.***

Examples of geometric design rendered in light and dark. From ***The Prang Elementary Course in Art Instruction, Book 3.***





Example of geometric design with floral element. From ***The Prang Complete Course, Manual Part IV.***

Examples of purely floral design rendered in light and dark, from the Japanese. Taken from ***The Prang Complete Course, Manual Part IV.***

BOOKS, MANUALS, AND MATERIALS FOR CARRYING OUT THE WORK IN DECORATION AND HISTORIC ORNAMENT.

Methods of instructing pupils in the foregoing work will be found under the head of DECORATION *in either of the following sets of books, and in the charts of historic ornament given under* 4 : —

1. THE PRANG COMPLETE COURSE, Books 1–10 inclusive, with the accompanying MANUALS.

2. THE PRANG NEW ELEMENTARY COURSE IN ART INSTRUCTION, Books 1–6 inclusive, together with THE PRANG COMPLETE COURSE, Books 7–10 inclusive, with the accompanying MANUALS.

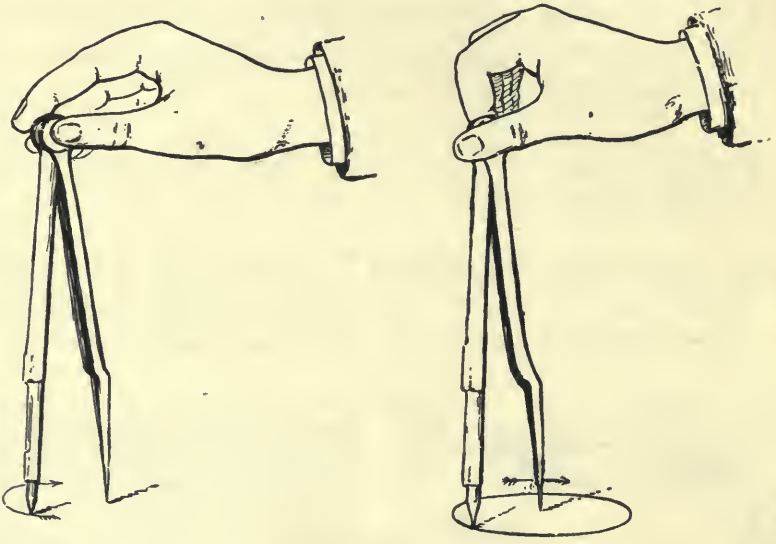
3. THE PRANG NEW COURSE IN DRAWING FOR GRADED SCHOOLS, Books 1–6 inclusive, together with THE PRANG COMPLETE COURSE, Books 9 and 10, with the accompanying MANUALS.

4. PARALLELS OF HISTORIC ORNAMENT, Egyptian, Greek, Roman, Byzantine, Romanesque, Gothic, and Saracenic Styles. In these charts abundant examples of the ornament of each of the styles named will be found.

C. IN CONSTRUCTION, OR GEOMETRIC AND WORKING DRAWINGS.

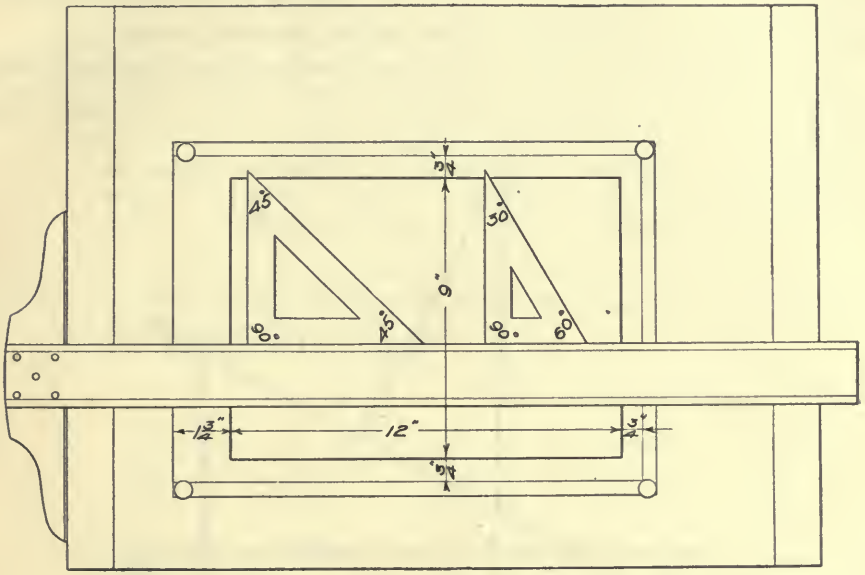
Geometric and working drawings. — *Instrumental.* In this work accuracy is of special importance. Much practice in the use of instruments is necessary in order to secure good results.

Instruments. — The pencil for this work should be very hard, and, for lining, sharpened to a chisel edge instead of a point. It should be



kept sharp by frequent rubbing on a coarse whetstone or piece of fine emery paper. The construction should be made with this pencil under light pressure, producing very fine but sharp lines and well-defined intersections. After the construction is completed in this way, the drawing should be finished by retracing with a softer pencil, or, better still, with ruling pen and India ink, such of the lines as need to be more distinct.

The compasses (dividers) should have fine, hard points, one of which should be detachable for the purpose of substituting a pencil point or pen. The joint should be so tight as not to permit of free, easy motion, otherwise the distance between the points is likely to vary when in use. The best compasses in this respect are those in which the opening is controlled by a spring and thumbscrew.



From Rouillion's ***Course in Mechanical Drawing.***

In laying off distances, the distance should be taken from the scale by means of compasses, then this distance should be applied to the line.

A drawing board is absolutely essential to good results. It should be of soft wood, so that paper can be attached by thumb tacks, smoothly dressed on one side, and its left-hand edge dressed to a straight line.

A T square is also necessary. It is used as shown above, the head being pressed against the left-hand edge of the board. By sliding the

T square along the board, means are furnished for drawing accurately any number of horizontal lines. The two right triangles or set squares, also shown above, are important. In one the acute angles are each 45°, and in the other they are 60° and 30°. By resting them on the T square we are enabled to draw any number of lines perpendicular to those drawn by aid of the T square alone; also lines of 30°, 45°, and 60° with those of either system mentioned. They also enable us to draw a parallel or a perpendicular to any line on the board, and through any point.

The complete outfit shown above, consisting of a drawing board, T square, and two set squares, costs from twenty to fifty cents, according to size.

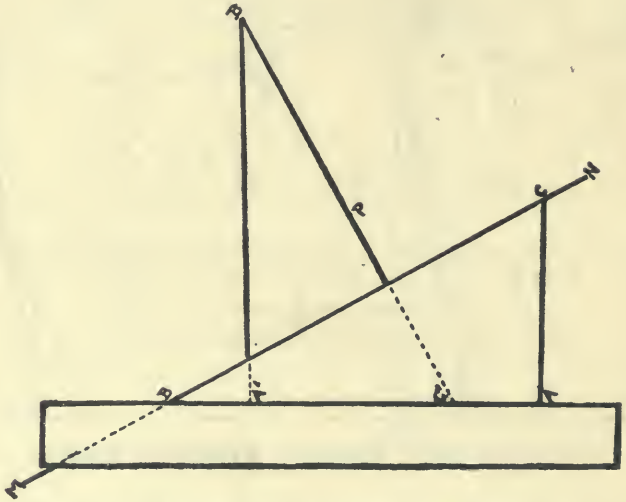


Illustration of the use of triangles.

(This method of drawing parallels and erecting perpendiculars is the one almost exclusively used by draughtsmen.)

Let it be required to draw a line perpendicular to MN, through the point P. Place either of the triangles with one of its shorter sides against the blade of the T square or other straight edge, and bring its hypotenuse

BC to coincide with the given line MN. Now, holding the straight edge in its place, revolve the triangle about its right angle A till the other side AC rests on the straight edge, then slide it along till the hypotenuse includes the point P, and B′C′ will be the perpendicular required. By sliding the triangle on the rule, it is evident that its sides do not change direction, and a series of parallels may readily be drawn to either side in either position.

Geometric Constructions.—Candidates should be prepared to make the following geometric constructions: —

NOTE.— *When the* T *square, triangles, and drawing board are used, this series of problems is of less direct use to pupils. It is well, however, that pupils should be familiar with these problems in order that they may be able to meet any requirements that may be made. In case the* T *square, triangles, and drawing board are not used, these problems are indispensable in preparing pupils for the examination.*

1. To draw a line perpendicular to a given line: (*a*) from a point on the line; (*b*) from a point outside the line; (*c*) at the middle point of the line; (*d*) at the extremity of the line.

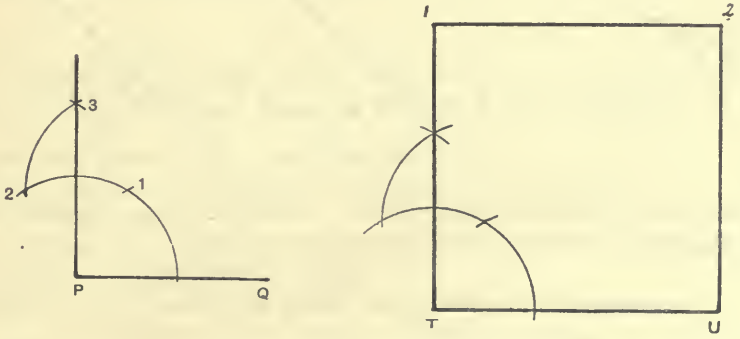
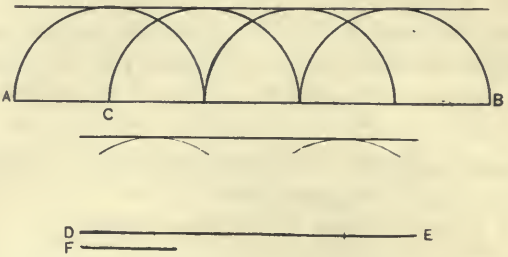


Illustration of geometric problem (1. *d*) *and its application in the construction of a square. From* ***The Prang Complete Course, Manual Part VI.***

Application to construction of squares and rectangles when the sides are given, and to bisection of a given line.

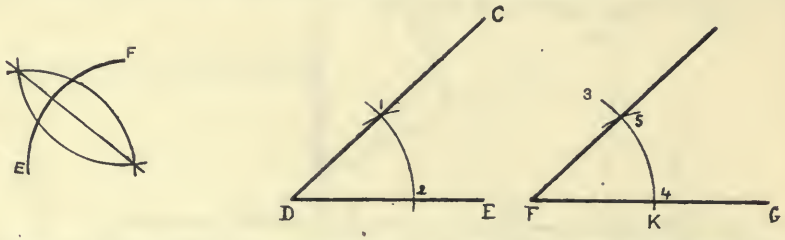
2. To draw a parallel to a given line: (*a*) through a given point; (*b*) at a given distance from the given line.



Examples of drawing parallel lines. *From* ***The Prang Complete Course, Manual Part VI.***

3. To bisect a given arc or a given angle.

4. To construct an angle equal to a given angle.



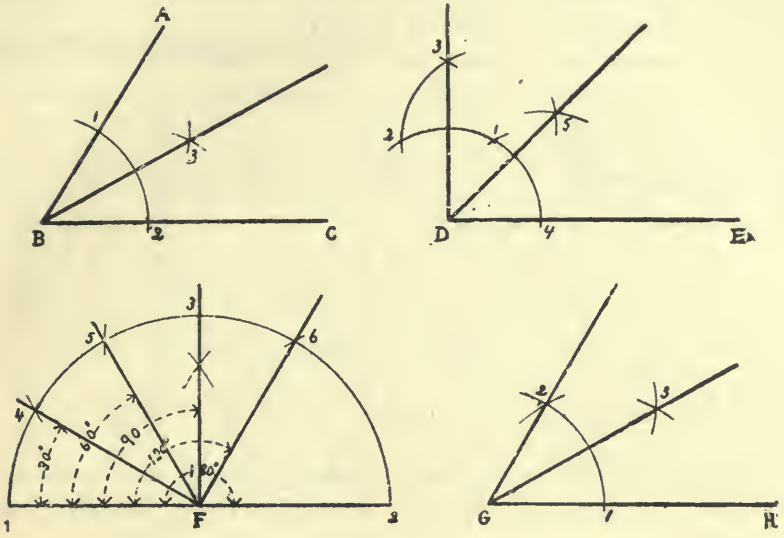
Examples of geometric constructions. *From* ***The Prang Complete Course, Manual Part VI.***

5. To construct triangles whose sides are given: (*a*) equilateral; (*b*) isosceles; (*c*) scalene.

6. To divide a line into equal parts.

NOTE. — *Problem* 6 *and the construction of the pentagon, hexagon, and other geometric figures are indispensable even when the* T *square, triangles, and drawing board are used. Greater facility in using the* T *square, etc., is gained when the geometric problems are understood.*

7. To construct angles of 30°, 45°, 60°, and 90°.



Examples of bisecting angles and constructing angles of different degrees. From ***The Prang Complete Course, Manual Part VI.***

8. To draw a circumference through any three points.

Application to finding center of a given circumference, and to circumscribing a circle about a triangle.

9. To inscribe a circle within a triangle.

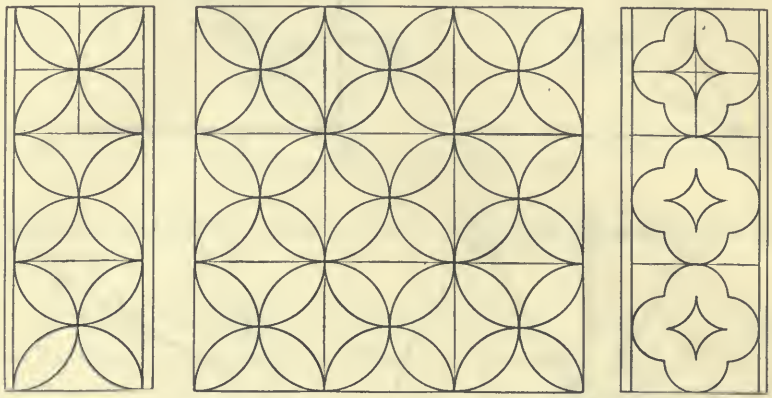
10. To draw a trefoil and a quatrefoil.

11. To draw a regular hexagon.

12. To draw a regular pentagon.

Geometric designs. — As the geometric constructions are taken up they should be extensively applied in the construction of geometric designs. (See Plates 4, 5 *of Bulletin No. 8.*)

Students should be encouraged to make original geometric designs.

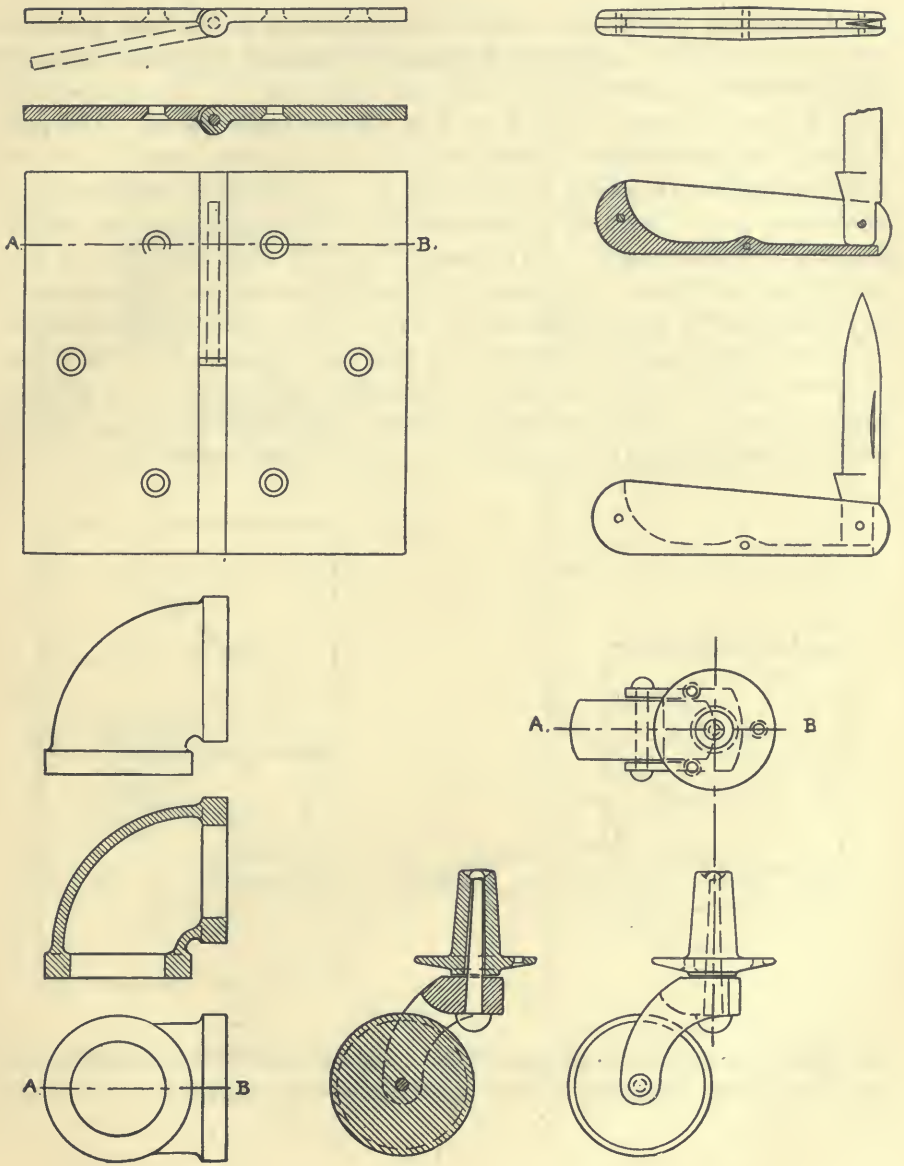


Examples of geometric design. From ***The Prang Complete Course, Manual Part III.***

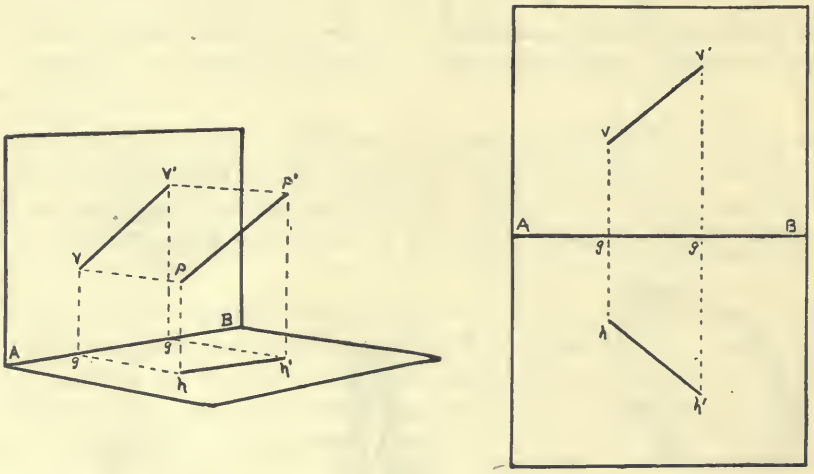
Working drawings. — Working drawings are drawings giving such facts of form, size, and position as may be required in constructing the objects or parts of objects represented. They are usually constructed with instruments. They consist of projections, sections, and developed surfaces or patterns.

On page 55 *examples of the drawings named above are given as found in* ***The Prang Complete Course, Manual Part IV.*** *These drawings not only illustrate sections, but they also show such sections as are directly practical — that is, the sections are such as are actually needed to make the structure of the objects more clearly understood.*

An object is represented by these projections (plan and elevation, otherwise called top and front view) by fixing its relations to two or more reference planes, called planes of projection. These planes are usually arranged at right angles to each other. The line in which they meet is called the ground line. The object to be represented is assumed to be in the angular space between the planes.

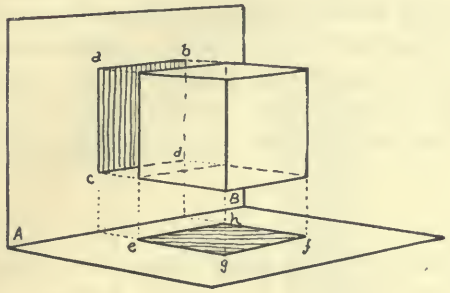

A.
B.
A.
B
A.
B

In order to give a correct idea of the meaning of working drawings, teachers are advised to join two pieces of board at right angles and to attach to them a sheet of folded paper as shown below. To represent the point P, drop a perpendicular from P to the horizontal plane. The point *h* where this perpendicular meets the horizontal plane is called the horizontal projection (or plan) of the point P. In the same manner, a perpendicular to the vertical plane, meeting it at *v*, determines the vertical projection of the point P. The point P′ will be determined in the same way by the projections *h′*, *v′*, also the line PP′ joining the two points will be represented by the projections *hh′*, *vv′*. If now the paper be detached from the board and laid out flat, we shall have the result shown below; *gh* gives the distance of the point P from the vertical plane; *gv* gives its distance from the horizontal plane. Note that the lines *vg* and *hg* are both perpendicular to the ground line at *g*, and are therefore one line.



This is projection in the first angle. By this method of projection the plan or top view is placed below the front elevation or front view.

If an object like a cube be placed *in either of the positions* shown below, the resulting working drawing will be shown.



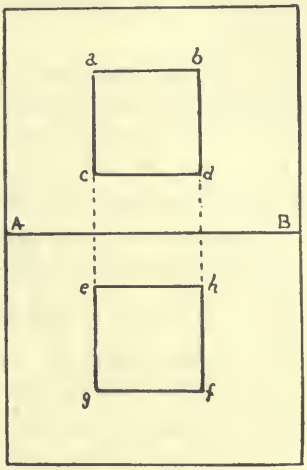
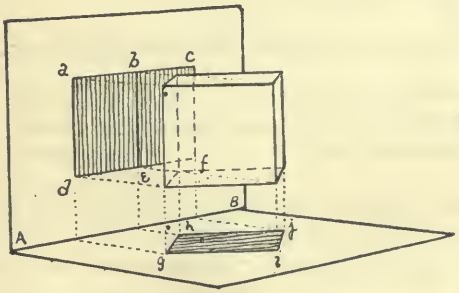


Fig. 1.



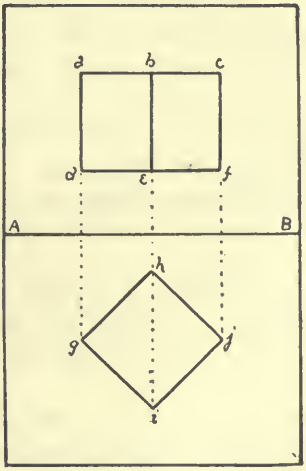


Fig. 2.

Notice that the three dimensions of the object (Fig. 1) are represented respectively by the three lines *ac*, *cd*, *eg*, while the position of the object is

shown by the positions of its projections with respect to the ground line AB. If the object is placed with the diagonal of one of its faces perpendicular to the vertical plane (Fig. 2), the result will be as shown in that figure.

In these representations it is assumed that all lines are straight lines, and all angles right angles, if they are not shown to be otherwise by the drawings. Most objects having curved lines or *right or* oblique angles may be so placed as to show all the facts by two projections. All the facts of the square prism and the right cone are shown by two projections in the drawings on page 51, where they are represented as standing on end on the horizontal plane.

In all working drawings: —

Visible edges are represented by heavy lines, thus: ————

Invisible edges may be represented by heavy broken lines, thus: – – – – – –

Working lines and connecting lines are made light, and may be broken, thus: – – – – – –

Dimension lines are frequently made thus: ←——→

A center line is sometimes used, thus: ——·——·——

The following conventions are of good standing with draughtsmen: —

1. Lines of the Object.

a. *Full line for visible edges or outlines.* (See 2.)

b. *Long dash line for invisible edges or outlines.* (See 3.)

c. *Half-tinting or section lines at* 45°. (See 4.)

2. Helping or construction lines.

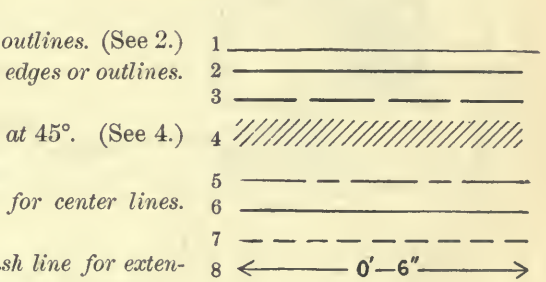
a. *Short and long dash lines for center lines.* (See 5.)

b. *Light full line or short dash line for extension or working lines.* (See 1 or 7.)

c. *Light broken line with arrowheads and figuring for dimension lines.* (See 8.)

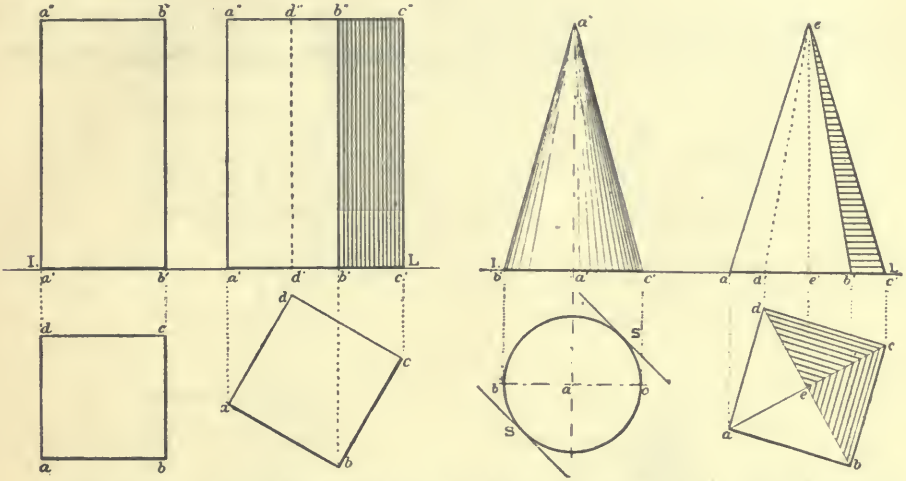
d. *Feet always to be expressed in figuring.* (See 8.)

e. *Line of fraction horizontal, not oblique;* as $\frac{1}{2}$.



In case the drawings are finished in ink, dimension lines are usually represented in red, and all working lines are sometimes so represented. There are not, as a rule, well-established conventions as to the kinds of line used in working drawings.

Light, if considered, is usually assumed to come from above and the left; and in this case those edges adjacent to the sides in shadow are made heavier.

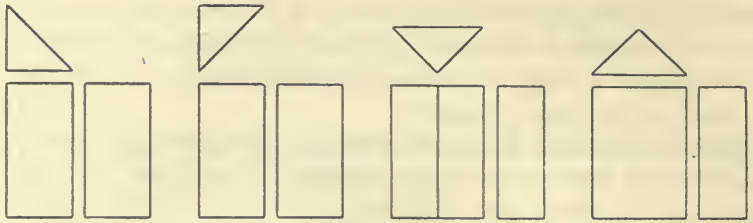


Examples of working drawings showing the plan below the elevation, and treatment in light and shade. From ***The Prang Complete Course, Manual Part IV.***

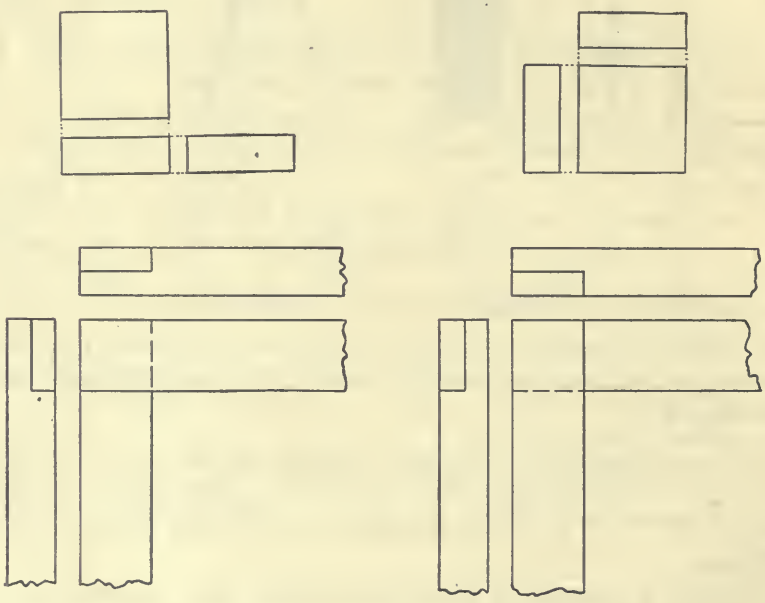
The arrangement of plan and elevation shown in the foregoing figures is quite generally used, but not always. Many prefer to place the plan above the elevation. Either method will be allowed in the examination.

Requirements: —

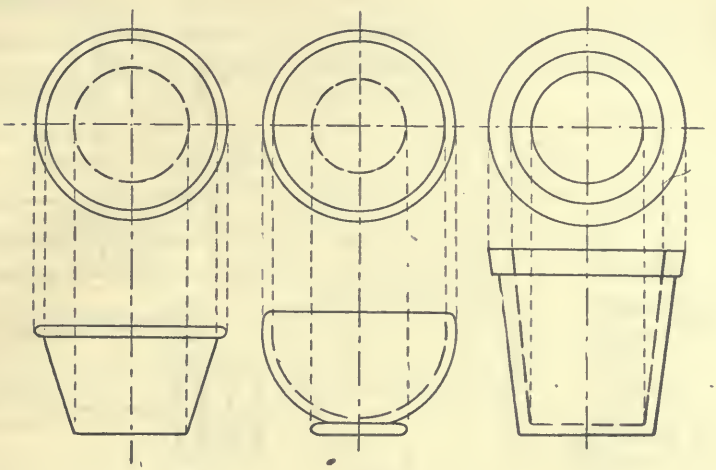
Working drawings will be required of the type solids given under pictorial drawing (see pp. 19 and 20), and of simple objects based on these type solids, placed with a principal face, or axis, parallel to one of the planes of projection and perpendicular to the other. Only two projections of any object will be called for in the elementary examination.

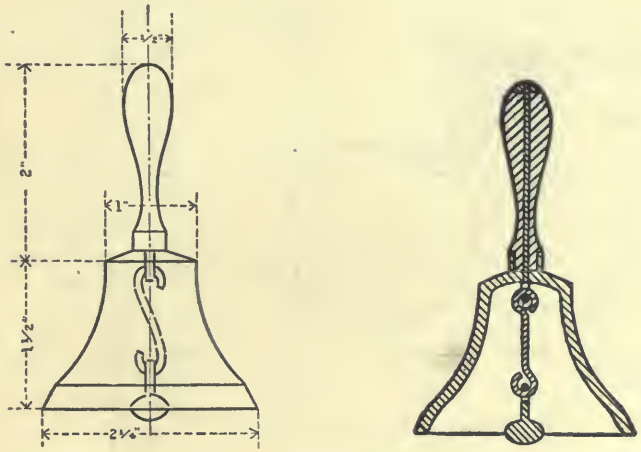


Examples of working drawings with the plan or top view above the elevation or front view. From ***The Prang Complete Course, Manual Part IV.***



Examples of working drawings of models and objects. From ***The Prang Complete Course, Manuals Parts III. and IV.***





Examples of working drawings of objects. From ***The Prang Complete Course, Manual Part IV.***

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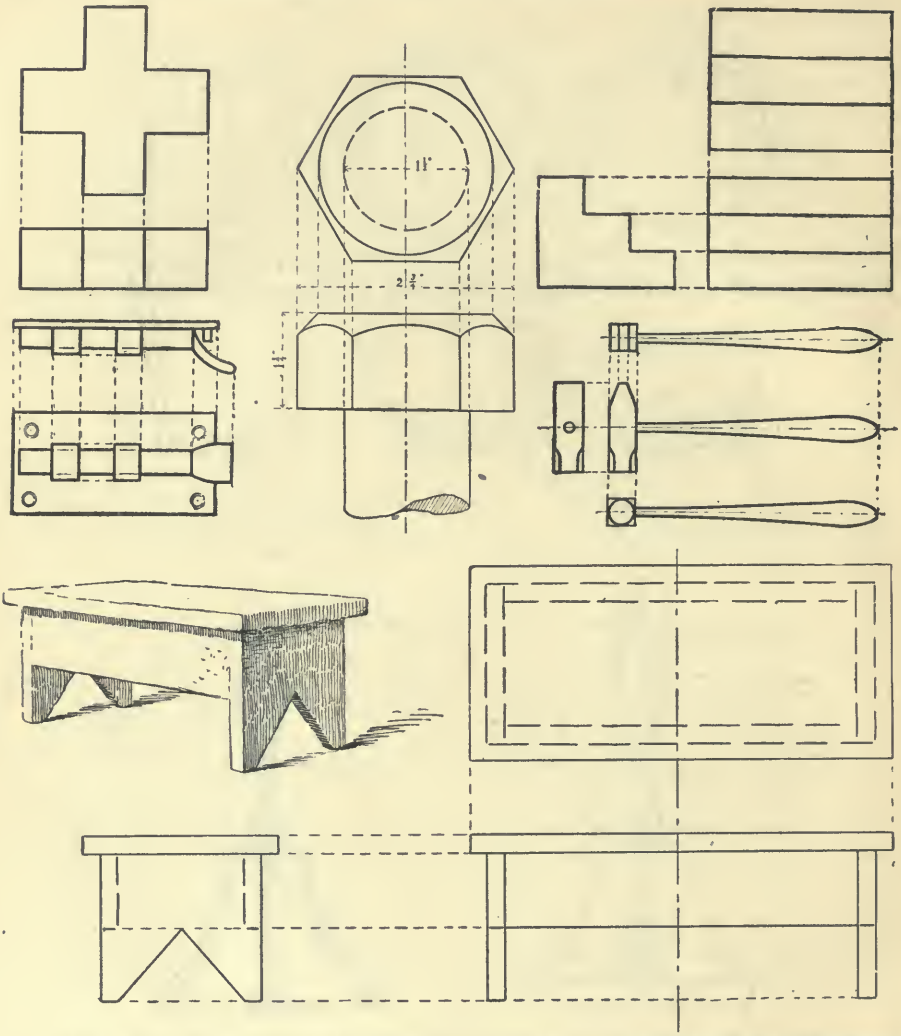
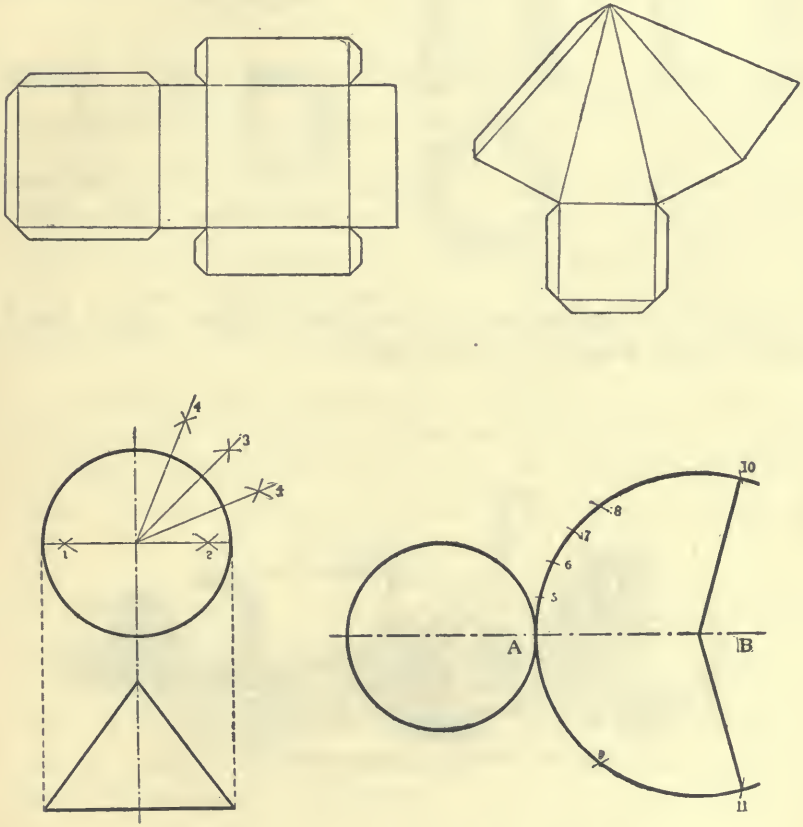
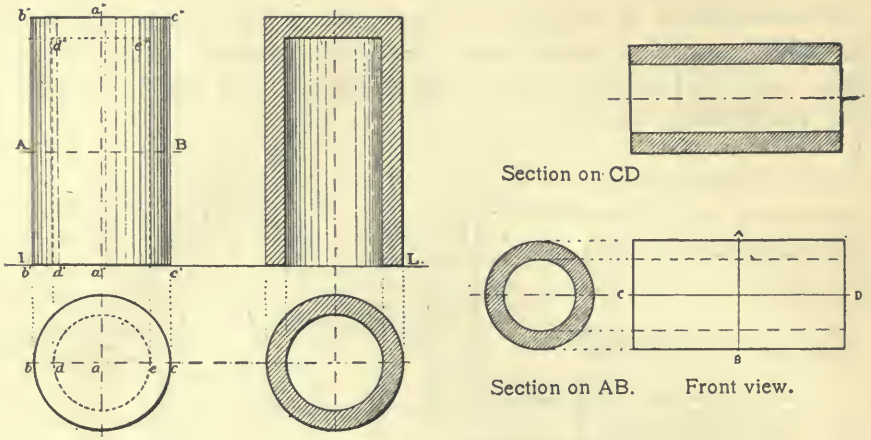


Examples of working drawings of objects. From ***The Prang Complete Course, Manual Part IV.***

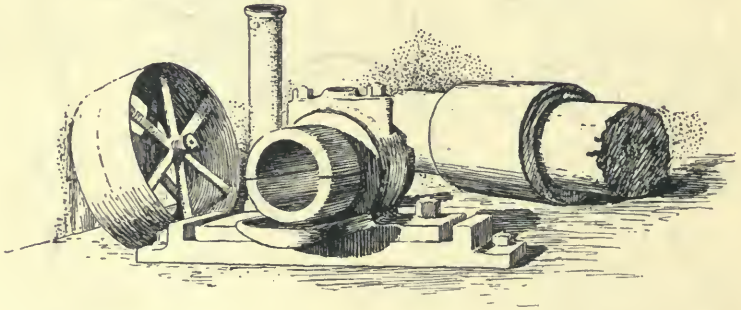
Development of surfaces of these type solids, except sphere and spheroids, and longitudinal and transverse sections of all the type forms and of simple objects based on them, will also be required. (*See illustrations below.*)



Examples of surface development. From ***The Prang Complete Course, Manuals Parts III. and IV.***



Examples of longitudinal and transverse sections. *From* ***The Prang Complete Course, Manuals Parts III. and IV.***



"Work for some good — be it ever so slowly;
Labor — all labor is noble and holy."

BOOKS, MANUALS, AND MATERIALS FOR CARRYING OUT THE WORK IN CONSTRUCTION.

Methods for instructing pupils in the foregoing work will be found under the head of CONSTRUCTION *in either of the following sets of books:—*

1. THE PRANG COMPLETE COURSE, Books 1–10 inclusive, with the accompanying MANUALS. If the method of teaching projection through the first angle is preferred to the workshop method (placing the top view or "plan" above the front view or "elevation"), Book 13 of THE AMERICAN TEXT BOOKS OF ART EDUCATION will be needed.

2. THE PRANG NEW ELEMENTARY COURSE IN ART INSTRUCTION, Books 1–6 inclusive, together with THE PRANG COMPLETE COURSE, Books 7–10 inclusive, with the accompanying MANUALS. Book 13 of the AMERICAN TEXT BOOKS OF ART EDUCATION will be needed under the conditions stated above under 1.

3. THE PRANG NEW COURSE IN DRAWING FOR GRADED SCHOOLS, Books 1–6 inclusive, together with THE PRANG COMPLETE COURSE, Books 9 and 10, with the accompanying MANUALS. Book 13 of THE AMERICAN TEXT BOOKS OF ART EDUCATION will be needed if it seems desirable to follow the method of projection giving the plan below the elevation.

NOTE. — *A full explanation of working drawings will be found in Rouillion's or in McCord's* **Mechanical Drawing.**

A SUGGESTED COURSE

OF ONE HUNDRED LESSONS TO PREPARE FOR THE REGENTS' EXAMINATION IN ELEMENTARY DRAWING FOR THE FIRST YEAR ACADEMIC CERTIFICATE.

If the pupils have completed ***Books 1–10 of The Prang Complete Course,*** or ***Books 1–6 of the New Course for Graded Schools,*** before entering the high school, it will only be necessary to review the work already done, with a view to memorizing the principles in Representation, Decoration, and Construction (by means of abundant application of these principles) and the styles of historic ornament. It may be well to add to this work the theoretic perspective and the work in projection of ***Book 13 of The American Text Books of Art Education.***

In case the pupils come to the work with little or no preparation in drawing, the following course of one hundred lessons (the regular requirement of time in this subject, — twenty weeks) will enable pupils to meet the requirements for the First Year Academic Certificate :

COURSE OF STUDY.

Five Lessons in the recognition of the type forms, — the sphere, hemisphere, ellipsoid, oblate spheroid, ovoid, cube, square prism, square plinth, square pyramid, cylinder, circular plinth, and cone.

Twenty Lessons in the pictorial representation of these type forms and objects based upon them.

Ten Lessons in the pictorial representation of flowers, sprays of leaves, etc.

Five Lessons in the study of pictorial representation in light and shade.

Fifteen Lessons in the study of historic ornament, including the drawing of examples of the Egyptian, Greek, Roman, Byzantine, Romanesque, Saracenic, and Gothic styles.

Fifteen Lessons in the study of the conventionalization of plant forms, together with the arrangement of these conventionalized forms, and also of historic forms, in rosettes, borders, and surface designs.

Five Lessons in memorizing geometric problems.

Fifteen Lessons in the study of views of type forms and simple objects based upon them.

Ten Lessons in general review.

While it will not be possible for each pupil to have a complete set of the following books, charts, etc., it is most essential that all the pupils may have free access to them for inspiration and for direct technical aid:

The Prang Complete Course, Books 1–10 inclusive, with Manuals, Parts I., II., III., IV., VI., and VII.

The Prang New Course in Art Instruction, Books 1–6 inclusive, with accompanying Manuals.

The Prang New Course in Drawing for Graded Schools, Books 1–6 inclusive, with accompanying Manual.

Parallels of Historic Ornament, Egyptian, Greek, Roman, Byzantine and Romanesque, Saracenic, and Gothic styles.

The American Text Books of Art Education, Books XIII. and XIV., and the Book on Historic Ornament.

Rouillion's Course in Mechanical Drawing.

NOTE.—All the text books of this list are published by THE PRANG EDUCATIONAL COMPANY.

"We have seen that the need of the type — the embodiment of the ideal — is a universal need in education. Let us recognize fully its value in our special work of instruction in Form as the only basis for form idealization; and on this basis we will no longer teach drawing or modeling or painting as mere graphic representation, — the passive reflection of the facts of material objects. We will teach *Art*, the exercise of the creative activities of the individual, grasping the truths of surrounding nature and human life, fusing them in his spiritual nature in the service of his ideals, and bringing forth from this inner treasury of his mind things that the world needs for its material comfort and for its spiritual growth. With this view of Art, let us think of the types and present them for what they actually are, — simple embodiments of man's ideals of pure form, the reflection or image of the form ideals shadowed forth in this vast creation of which we are a part, the everlasting form ideals with which the human mind must act in converting material nature to the service of human nature." — JOHN S. CLARK.

REQUIREMENTS

FOR THE

EXAMINATION IN ADVANCED DRAWING FOR THE SECOND YEAR ACADEMIC CERTIFICATE.

Introductory note. — The following statements and requirements are those given in the ***Examination Bulletin No. 8***, issued by the Department of Regents in the State of New York, in June, 1895, under the head of ADVANCED DRAWING.

On page 273 of ***Bulletin No. 8*** *are found the requirements for the* **Second Year Academic Certificate.** *Advanced Drawing is included in the list of subjects, and is therefore to be considered a regular subject for the second academic year. The tendency to place this subject in grades lower than the second academic year would seem to be guarded against by such a statement as is found on page 437 of the* ***Bulletin*** *concerning the formation of advanced classes with immature pupils. On page 438 of the* ***Bulletin***, *Advanced Drawing is stated as a two-count or twenty-week subject — the "count," as stated on page 437 of the* ***Bulletin***, *being ten weeks' work with five lessons each week. A course of one hundred lessons would therefore be necessary to meet the requirements in this subject. A suggested course of this length will be found in the last part of this division of the Manual.*

REQUIREMENTS AS TO PREPARATION FOR THE SECOND YEAR ACADEMIC CERTIFICATE.

Advanced drawing. — This subject should be pursued for at least *twenty weeks* after the completion of the work outlined in the elementary syllabus.

THE EXAMINATION WILL INCLUDE:—

A. REPRESENTATION OR PICTORIAL DRAWING.

Pictorial drawings. — *Freehand or instrumental.* A more extended application of the principles of perspective in instrumental work, and in freehand drawings of familiar objects and landscapes, with special attention to grouping. (See following plates.)

An example of simple landscape from ***The Prang Elementary Course in Art Instruction, Book 4,*** *is given below.*

Freehand Drawing — Grouping or Composition.

Grouping is the art of arranging objects in a pleasing manner. A row or a mere collection of objects is not a group in pictorial composition. The objects represented should be arranged with reference to one principal object to which the others are accessory, and they should be placed so that the eye may take in the whole group at once.

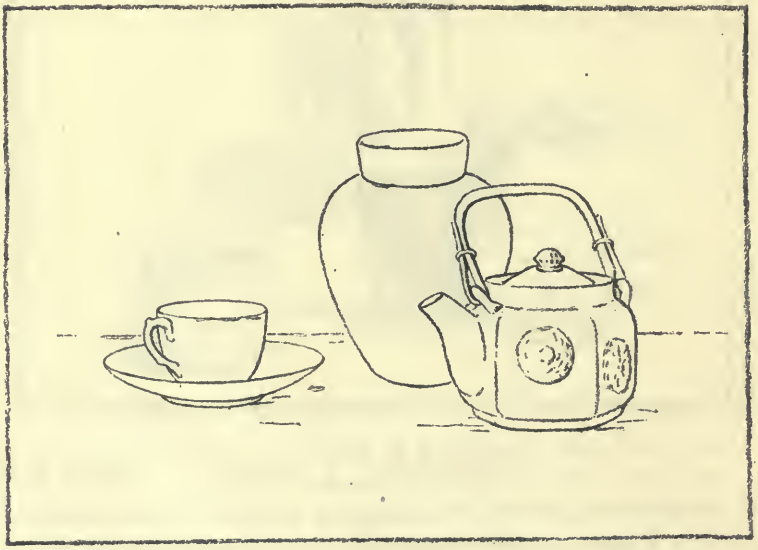
As two solids can not occupy the same space at the same time, care should be taken, in the drawing of a group of objects standing at the same level, that the bases, if wholly represented, do not interfere.

Example of grouping with special attention to the idea that "no two solids can occupy the same space at the same time." The objects selected to make the group show this point admirably, the cup allowing the eye to calculate the distance between the bases of the two associated objects. From ***The Prang Elementary Course in Art Instruction, Book 5.***

NOTE. — *One of the greatest difficulties to be overcome in the early work in drawing from groups of objects is the want of appreciation of space values. The general principle on which this point in the representation of objects is based is found in Exercise VIII. of* **Book 6** *of* **The Prang Complete Course.** *Abundant examples of methods of teaching this point will be found in* **Manuals Parts III. and IV.** *of* **The Prang Complete Course.** *In teaching the principles of theoretic perspective the complete understanding of this principle may be easily secured.*

Show the table line, that is, the far edge of the surface on which the objects rest. If invisible edges are required, indicate them by light lines. (*See pages 19 and 20, drawings of type forms.*)

NOTE. — *The table line is a part of the composition of the picture drawn from a group of objects. In the elementary stages of the work, it can be presented concretely by calling the attention to the farther edge of the surface on which the group rests. In the more advanced work, however, it seems well to lead to the location of the table line by calling the attention to the general points of the drawing; the general character of the objects as to size, apparent solidity, etc.; the arrangement of the objects, etc.; and the distance of the objects below the eye; and by asking the pupils to locate the table line in a way to secure a pleasing pictorial effect.*



Example of rendering the table line in an outline drawing. From ***The Prang Elementary Course in Art Instruction, Book 4.***

"The cup that cheers, but not inebriates."

Lunch in Holland.

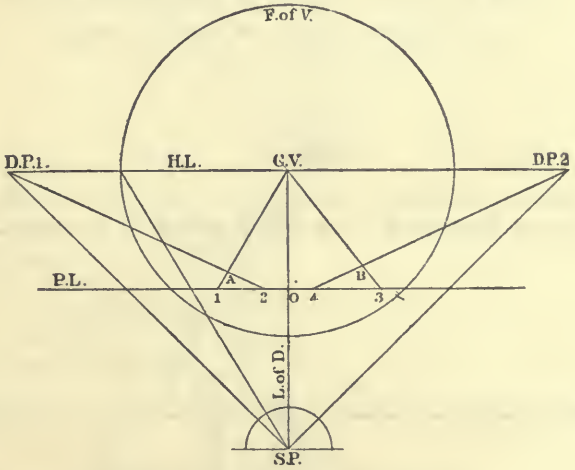
Examples of groups rendered in light and shade. From ***The Prang Complete Course, Manual Part IV.***

Examples of towers and landscapes. From ***The Prang Elementary Course in Art Instruction, Books 3 and 5.***

Instrumental Drawing — Mechanical perspective.

The perspective of an object may be constructed from its plan and elevation by any method that the student may know.

The following perspective problems are taken from ***The American Text Books of Art Education, Books XIII. and XIV.****, published by The Prang Educational Company. In these books a* ***complete series of exercises in parallel and angular perspective*** *based upon educational principles, and with directions for working them out, will be found.*

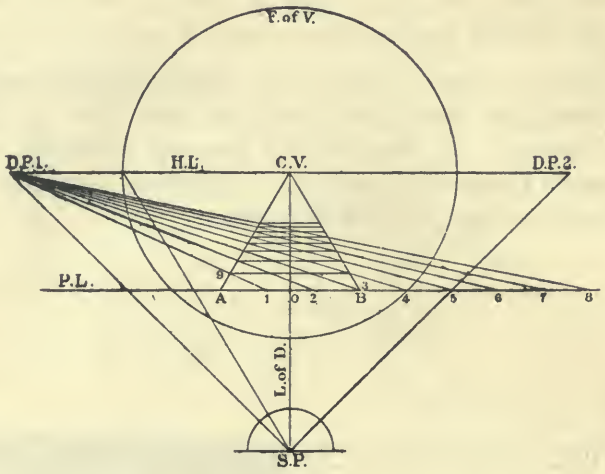


Location of points in perspective.

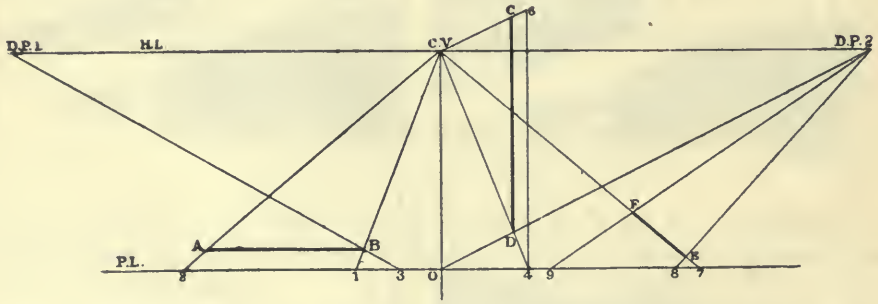
PROBLEM 1. — *To find a point* A *lying on the ground plane,* 3′ *to the left of the spectator and* 2′ *within, that is, beyond* P.P. Set off on P.L. 3′ to left of L. of D. in 1. Draw from 1 to C.V. Set off 2′ to right of 1 in 2. Draw from 2 to D.P. 1, cutting the line from 1 to C.V., in A. A will be 3′ to left of spectator and 2′ within P.P.

PROBLEM 2. — *To find a point* B *on the ground plane,* 4′ *to the right of the spectator and* 3 *within* P.P. Set off 4′ to right of 0 in 3, and draw from 3 to C.V Set off 3′ to left of 3 in 4; from 4 draw to D.P. 2, cutting the line from 3 to C.V. in B. B will be 4′ to right of spectator and 3′ within P.P.

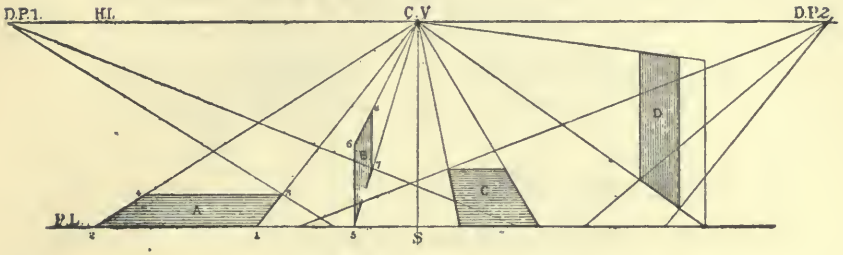
Parallel Perspective.



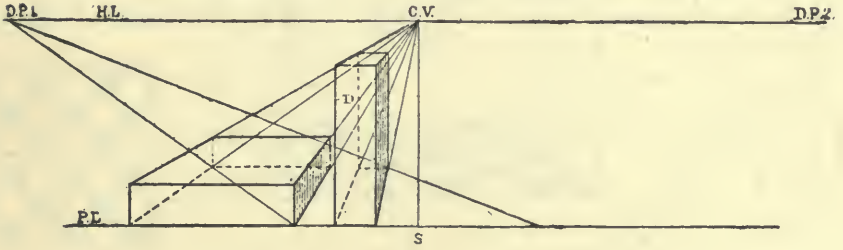
Application of PROBLEM 1 *in the drawing of a railroad track.*



Horizontal and vertical lines in parallel perspective.

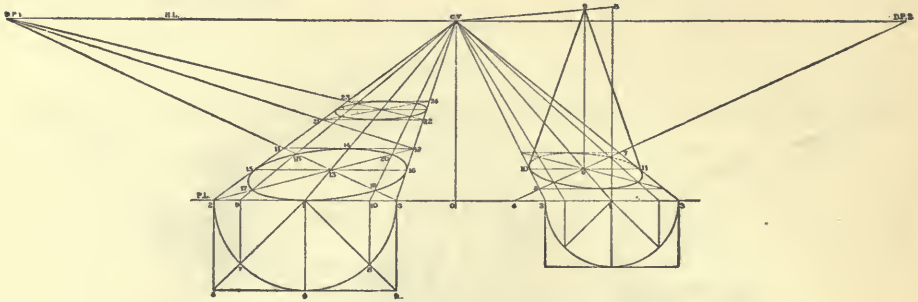


Square planes in parallel perspective.

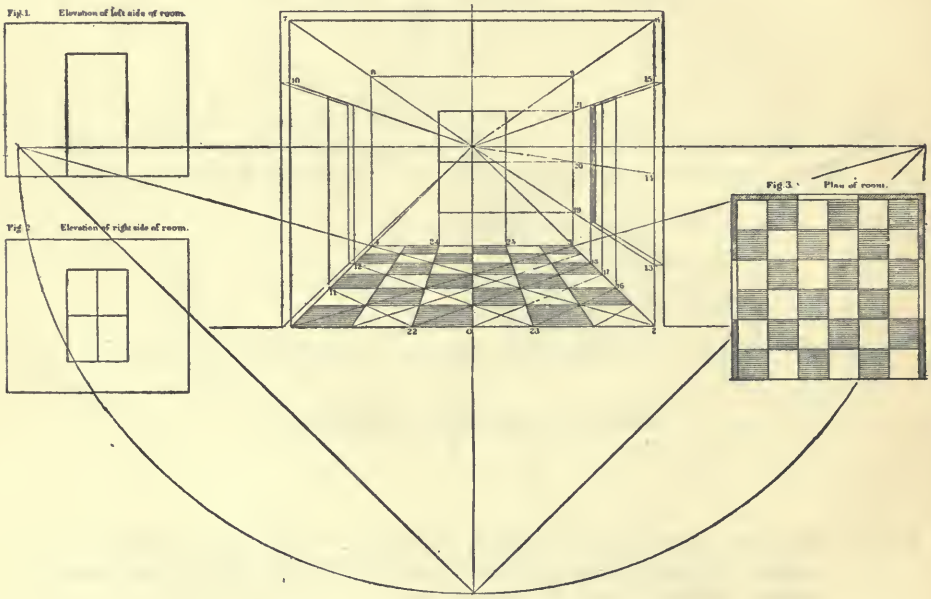


Plinths in parallel perspective.

NOTE. — *Two of the most important points in the learning of theoretic perspective are the location of points within the picture plane and the measuring of horizontal and vertical distances within the picture plane. The problems given above should, therefore, be taught with great care to the end that pupils may be able to memorize these points thoroughly and be able to apply them in the following problems.*



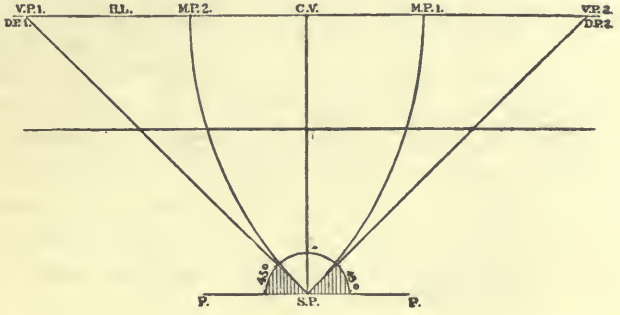
Circles and cone in perspective.



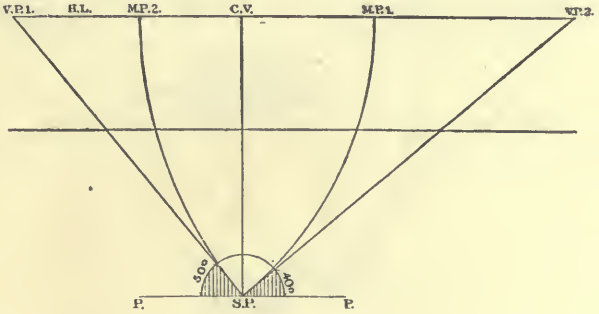
Projection and parallel perspective. Plan, elevations, and perspective representation of room.

Angular Perspective.

NOTE. — *The location of points within the picture plane becomes more complicated in angular perspective, and great care is necessary in order to secure a clear impression of the use of vanishing points and measuring lines in doing this work.*

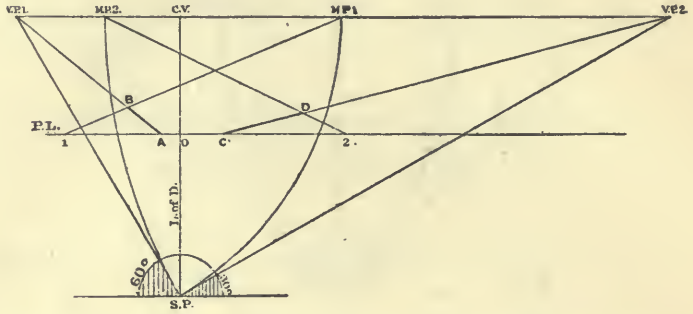


Vanishing points and measuring points in angular perspective for objects at 45° to the picture plane.

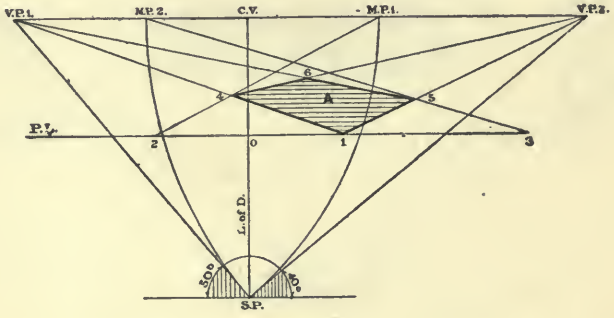


Vanishing points and measuring points in angular perspective for objects at 50° and 40° to the picture plane.

NOTE. — *The use of the measuring points* (M. P. 1 *and* 2) *in angular perspective, while similar to the use of the distance points in parallel perspective, will seem much more limited to the elementary workers in the subject. Plenty of applications of the principles should be given in order to thoroughly establish their use.*

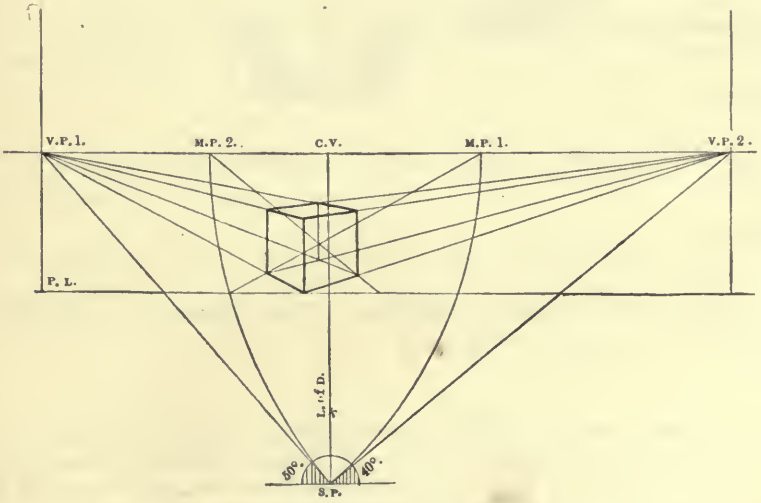


Horizontal lines in angular perspective at 30° *and* 60° *to the picture plane.*



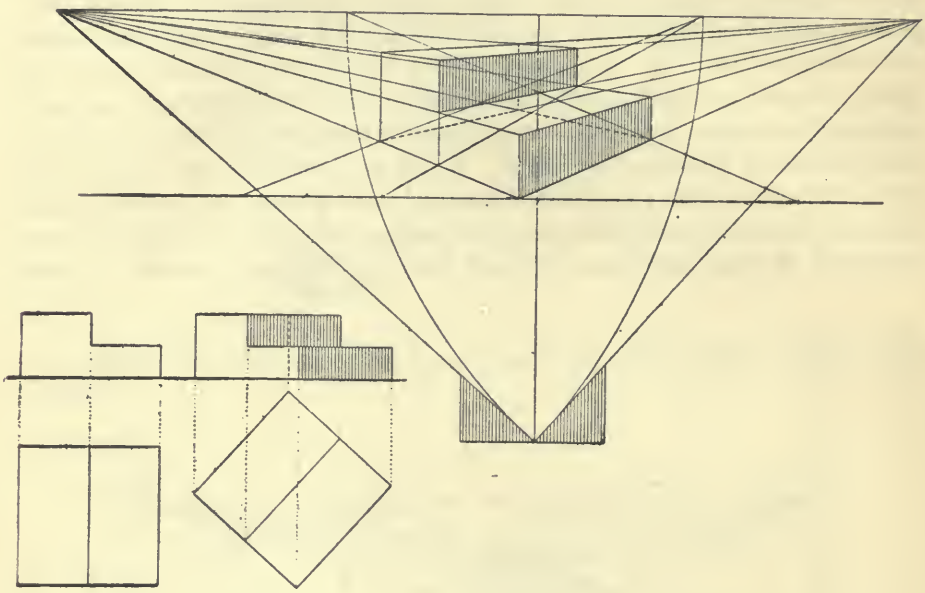
Horizontal plane in angular perspective at 50° *and* 40° *to the picture plane.*

It will be readily seen by following the steps in the series of problems in angular perspective up to this point (exercises on pages 79 and 81) that the drawing of the cube on this page is the outcome of the combination of the points presented in the exercises that precede this drawing. As a knowledge of theoretic perspective is, to a large degree, dependent upon the memorizing of certain definite points, it seems well to present these points simply and clearly, one by one, in order that they may become a basis for intelligent work in the subject. Very few terms are used, as a multiplicity of terms results in confusion of mind and consequent discouragement, especially to pupils so immature as many of those who endeavor to pass the examination in Advanced Drawing. It will be found that, by following this series of exercises, the pupils will not only be able to solve the problems given here, but they will also be able to reason out any combination of the principles presented in these problems. If, each time a principle is learned, several



Cube in angular perspective at 50° *and* 40° *to the picture plane.*

problems involving the same principle are solved, it will be found that the points will be fixed with a reasonable degree of certainty. The succeeding problem is of a complex nature, but involves no principle not previously given.



Projection and angular perspective. Plan, elevation, and perspective representation of a flight of steps.

NOTE. — *The question whether to use the method of teaching perspective by the aid of plan and elevation or by other methods is one of economy of effort or of space — or of the location of points on or within the picture plane when the object is so placed or is of such structure as to make the location of exact points, etc., difficult. It is well to know the method by plan and elevation thoroughly, although the method put forth in the preceding exercises meets all needs in elementary work.*

BOOKS, MANUALS, AND MATERIALS FOR CARRYING OUT THE WORK IN FREEHAND AND INSTRUMENTAL PERSPECTIVE.

Methods of instructing pupils in the work in freehand perspective and in light and shade will be found in the following books and manuals: —

THE PRANG COMPLETE COURSE, MANUAL Part IV.

WOODBURY'S SKETCHES, published by The Prang Educational Company.

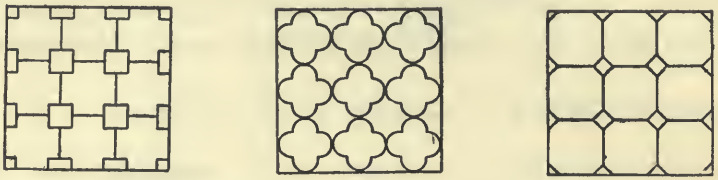
BARTHOLOMEW'S SKETCHES, three sets, published by The Prang Educational Company.

For the work in instrumental perspective, the following books will give what is desired in the way of method: —

THE AMERICAN TEXT BOOKS OF ART EDUCATION, Books XIII. and XIV.

B. DECORATION, OR DECORATIVE DESIGN.

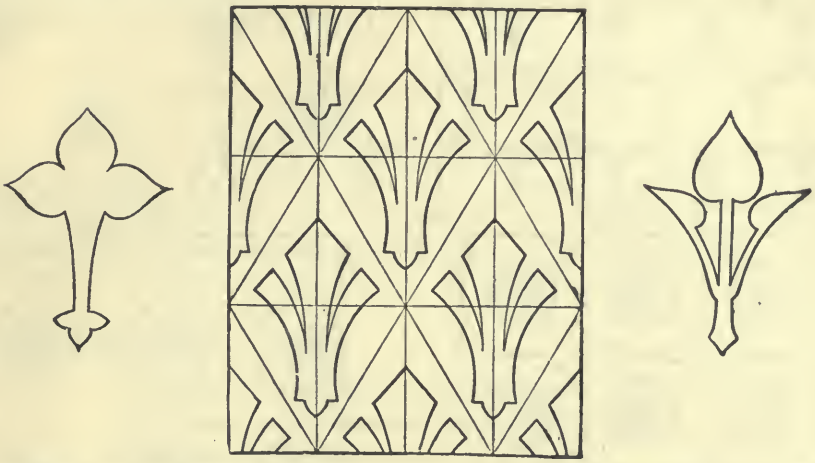
Decorative drawings. — *Freehand and instrumental.* A more extended study of the principles of decoration, and a higher degree of excellence in the work in design, including geometric figures, plant forms, and historic ornament, will be required. The examination will presuppose ability to make original geometric designs and a free conventionalization of plant forms.



Examples of original geometric design. From ***The American Text Books of Art Education, Clark Edition, Book 7.***

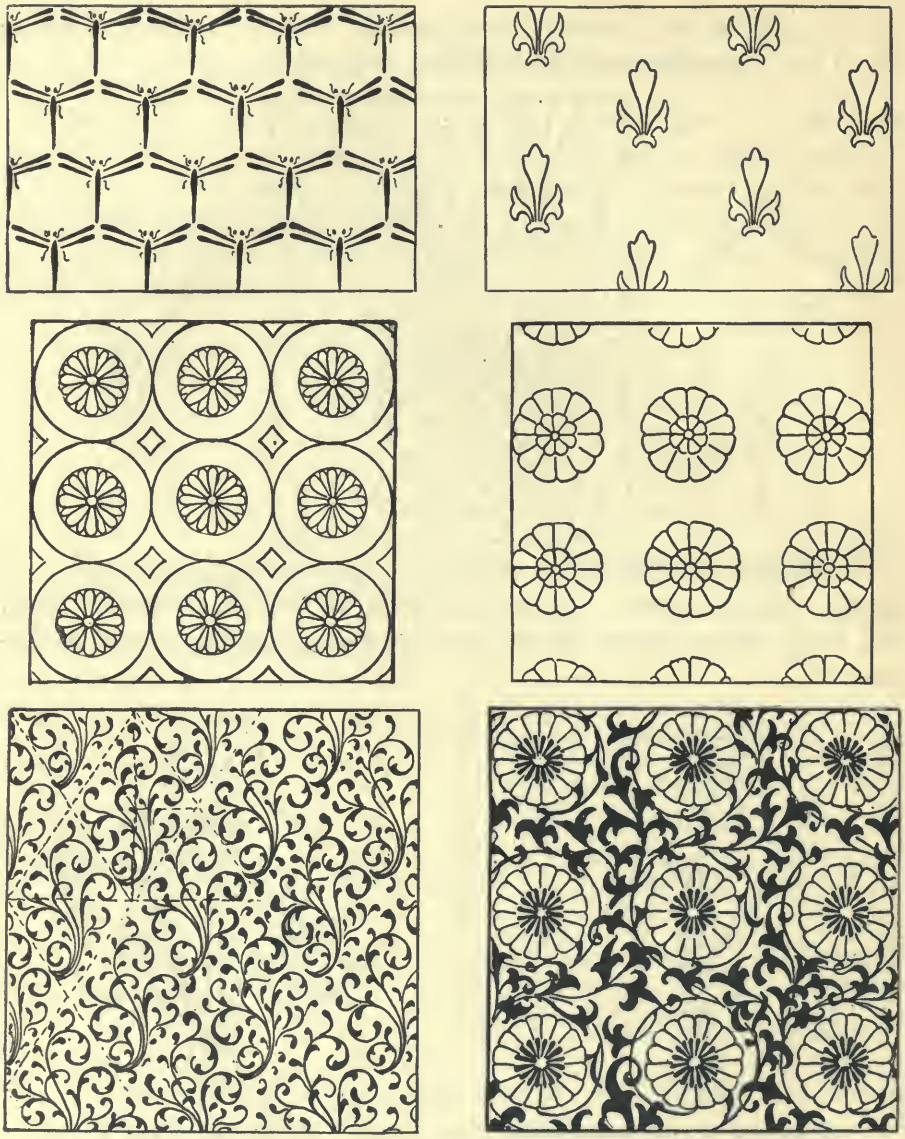
Examples of free conventionalization of plant forms. See also the honeysuckle design under "Laws of Growth," p. 34.

It will include bilateral arrangements with or without inclosing forms and conventionalized plant forms.



Examples of bilateral arrangements,— with an inclosing form in the surface design, without the inclosing form in the single units. From ***The Prang Shorter Course Manual*** *and* ***The Prang Complete Course, Manual Part IV.***

Examples of conventionalized plant forms. From ***The Prang Course.***



Examples of surface designs. *From* **The Prang Complete Course, Manual Part IV.**

The work on historic ornament is much more comprehensive than in the elementary syllabus, and includes the note on historic ornament. (See Plates 21–27 of ***Bulletin No. 8.***)

NOTE ON HISTORIC ORNAMENT.

The student of decoration should become familiar with the leading styles of ornament of nations of the past. To aid in this study a few thoughts suggested by R. N. Wornum in his *Analysis of Ornament* are given below, followed by an abstract of the work itself. (See Plates 21–25 of ***Bulletin No. 8.***)

The leading styles are:—

Ancient. — Egyptian, Greek, Roman.
Mediæval. — Byzantine, Saracenic, Gothic.
Modern. — Renaissance.

Some characteristics of the styles:—

Egyptian. — Symbolism, simplicity, grandeur, severity, conventionalization of natural forms.

Greek. — Estheticism, artistic finish, simplicity, conventionalization.

Roman. — Estheticism, extreme elaboration, richness.

Byzantine. — Christian symbolism, estheticism, conventionalization.

Saracenic or Moorish. — Rigid exclusion of symbolism, geometric symmetry, gorgeous color effects.

Gothic. — Christian symbolism, grandeur.

Renaissance, with its developments (trecento, cinquecento, Louis Quatorze). — Rebirth of classic styles, estheticism.

These various styles extended over a period of 3500 years, of which 2000 may be considered the ancient period, from the early historical times to the third century of our era. About 1000 years, from the third to the thirteenth century, may be considered the mediæval; and the last five centuries, the modern or renaissance period.

NOTE. — *Owen Jones'* **Grammar of Ornament** *can be found in most libraries, and is high authority on historic ornament.*

Style is another name for character. Every style depends on what is peculiar to it, never on what it has in common with other styles. These peculiarities are termed characteristics. The earliest styles are the most simple.

A. ANCIENT STYLES.

1. EGYPTIAN STYLE.*

In this style the elements have a particular meaning, and are rarely, if ever, chosen for beauty of effect, being mere symmetric arrangements. The painted ceilings of the tombs of the kings at Thebes form many good examples. Egypt is eminent in the complete adaptation of its own natural productions, and in the conventional treatment of local natural types.

The Egyptian details are not mere crude imitations of nature, but natural objects selected by symbolism, and fashioned by symmetry into ornamental decoration.

Examples of symbols and cartouches. From ***The Prang Complete Course, Manual Part IV.****, and from* ***Parallels of Historic Ornament.***

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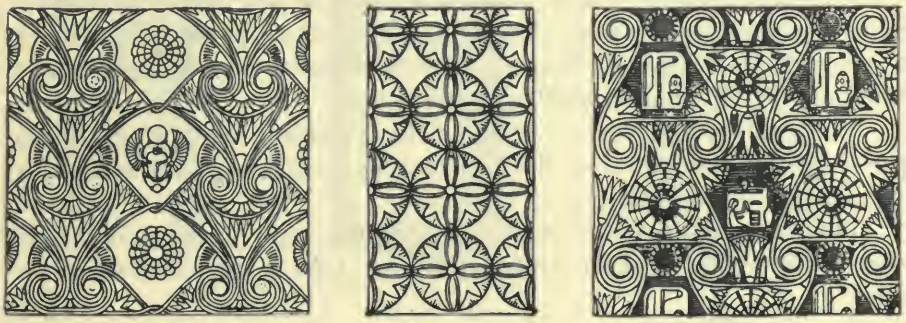
* *Goodyear's* **Grammar of the Lotus** *can be found in most libraries, and is excellent authority on Egyptian ornament. Wilkinson's* **Manners and Customs of the Ancient Egyptians** *will add interest to the work in Egyptian ornament.*

Wave-scroll and palmette.

Wave-scroll and lotus.



The use of symbols in surface decorations.

Examples of Egyptian borders and surfaces. From ***The Prang Complete Course, Manual Part IV.****, and from* ***Parallels of Historic Ornament.***

Here we have the earliest systematic efforts in design. In many respects the art was as thoroughly understood at Memphis or Thebes three thousand years ago, as it is at London or Paris to-day. Egyptian ornaments admit of no pictures of objects; all are treated conventionally.

Common Egyptian designs are: the winged globe, the beetle, the lotus, the papyrus, the zigzag, the asp, the cartouche, the spiral, the wave scroll, the fret, and the sphinx.

The *beetle* occurs in all sizes, and in almost all materials, and is a species of talisman or invocation of good luck. (*See p. 88, the scarabeus*).

The *globe* is supposed to represent the sun, the wings providence, and the two asps, one on each side of the globe, dominion and monarchy, or the creative, protective, and distributive powers, implying order. (*See p. 98, the winged globe.*)

We find this ornament placed over doors, windows, and in passages. It is sometimes of an enormous size extending thirty feet or more. It is also frequent in costumes and on mummy cases.

The Egyptian *sphinx* is a remarkable object in art. It is supposed to represent the combination of physical and intellectual power, or the kings as incarnation of such attributes. The chief position of the sphinx was on either side of the path leading to the temple.

The swelling *asps* we find arranged in symmetric opposition, one on each side of the *cartouche* or shield, inclosing the hieroglyphic name of a king, having the signification of dominion.

The *lotus*, or water lily of the Nile, is the type of the inundations from which Egypt derives its fruitfulness. (*See p. 36, examples of the lotus.*)

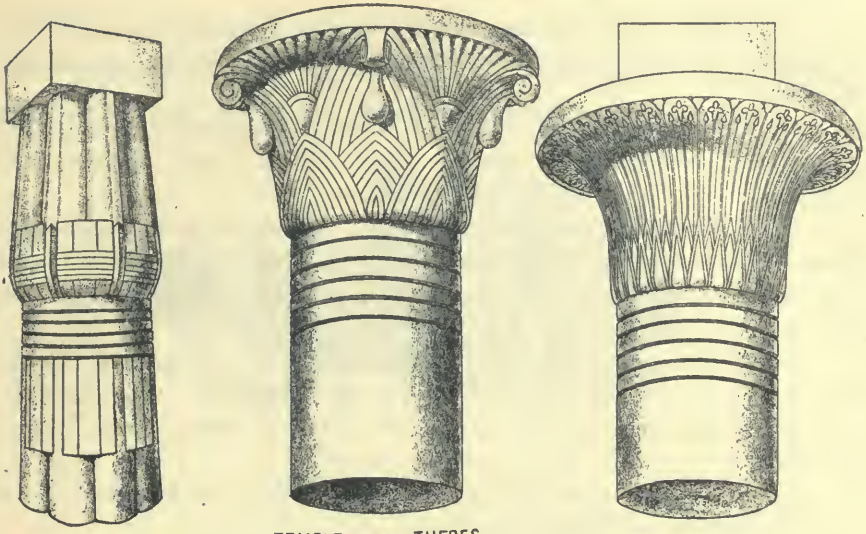
The *zigzag* is the type of the water, or of the Nile itself. The ancient signification of the zigzag is still preserved in the zodiac sign of the water-carrier or aquarius.

The *wave-scroll* represents water in motion. (*See p. 43, example of wave-scroll.*)

The *fret* is a type of the labyrinth of Lake Moeris, with its twelve palaces and three thousand chambers, indicating in their turn the twelve signs of the zodiac, and the three thousand years of transmigration which the wandering soul is condemned to undergo.

The Egyptians systematically varied their pillars in the same colonnade; two alike with their decorations complete were never placed together except as a pair of opposites. The varieties may be reduced to three essential forms, viz., truncated lotus bud, lotus bell, Isis head. Every capital is a variety of one of these essential forms, but the lotus or papyrus bell of the middle period is much the more common.

The Egyptian style influenced the Jew, the Greek, and the Persian. After Cambyses had plundered Thebes, he carried a colony of Egyptian artists with him to Persia.



Examples of lotus bud and lotus bell capitals and of corresponding bases of columns. From ***The Prang Complete Course, Manual Part IV.****, and from* ***Parallels of Historic Ornament.***

The *bull*, which figures largely in the Persepolitan sculpture, is explained as signifying the overthrow of the Assyrian power by the Persians.

In Egypt we find grandeur of proportions, simplicity of parts, and splendor or costliness of material — gold, silver, ivory, precious stones, and color — as the great art characteristics.

We also find the prevailing feature of Asiatic art to be *sumptuousness*. Examples: the works of the tabernacle, the temple of Solomon, the buildings of Semiramis and Nebuchadnezzar, and the palaces of the Persian kings.

Jewish ornament, like the Egyptian, appears to be purely representative. The only elements mentioned in Scripture are: the almond, the pomegranate, and the palm-tree, the lily or lotus, oxen, lions, and cherubim.

Extending our view still farther east, we find the fantastic the most striking feature of Hindoo art.

The Egyptian was a painted style. Its architecture was marked by the use of oblique lines. Length of line, firmness of drawing, severity of form, and subtlety of curvature are its characteristics. Dignity, sternness, simplicity bordering on monotony, extreme solidity, amounting to heaviness, was the expression of the national character of the people.

It is not till we come to Greece that we find the habitual introduction of forms for their own sake, for their esthetic value purely as ornaments, and this is a very great step in art.

In the following drawing the winged globe may be seen over the door — an example of the placing of this ornament in architecture. The meaning of the symbol and its position are suggested in the familiar lines —

> *"Cover my defenseless head*
> *With the shadow of Thy wing."*

An inscription at Edfou says that Thoth ordered that this emblem should be carved over every doorway in Egypt.

The following drawing may be found in ***The Prang Complete Course, Manual Part IV.,*** *and* ***The Prang Note-Book Illustrations.***

Temple of Edfou.

2. GREEK STYLE.

Three periods: —

Doric = Echinus and astragal.
Ionic = Doric and horns or volutes.
Corinthian = Acanthus.

Greek ornament owes its originality to the substitution of the esthetic for the symbolic principle.

The Doric age covers the first four centuries, from Rhœcus of Samos to Pericles.

The most important manufacture of the period of which remains exist, was that of the terra-cotta vases.

There are two classes of painted Greek pottery, the black and the yellow; that is, those vases that have black figures and ornaments, the ground of the vase being left the color of the clay; and those vases that have the ground painted black, and the figures left the color of the clay. (*See example of painted ornament on p. 95.*)

The anthemion, or flower ornament, is more than the mere honeysuckle; it is this flower alternated with the lily or analogous forms.

Occasionally in the Doric period emblematic ornaments were used with regard to the mysteries, sacrifices, funeral rites, etc., but these instances are rare.

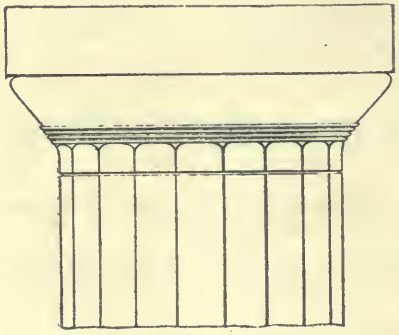
The rainless seasons of Egypt developed massive flat roofs; so the rainy seasons of Greece rendered the sloping roof necessary, the gable of which the Greeks eventually developed into their beautiful pediment.

The Doric order may be descriptively termed the echinus order, as the echinus is the ornament of the period.

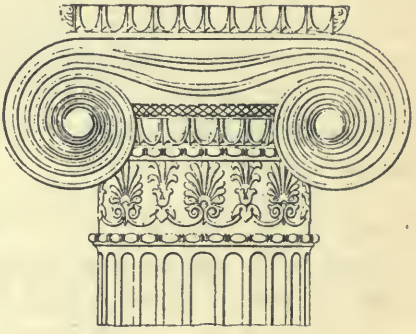
> *"Echinus, bold and simply marked,*
> *With astragal of beads and pearls*
> *Of shining gold on ground of red."*

Foliage performs a very secondary part in this period.

The *Doric capital* consists of a round flat cushion called the echinus, and a large square abacus.



Doric Capital. Parthenon.



Ionic Capital. Erechtheion.

Doric and Ionic capitals. From ***The Prang Complete Course, Manual Part IV.***

The *Ionic capital* supplanted the Doric, but added to it horns and volutes.

The *acanthus capital* is called Corinthian, because discovered by Callimachus of Corinth, 400 B.C.

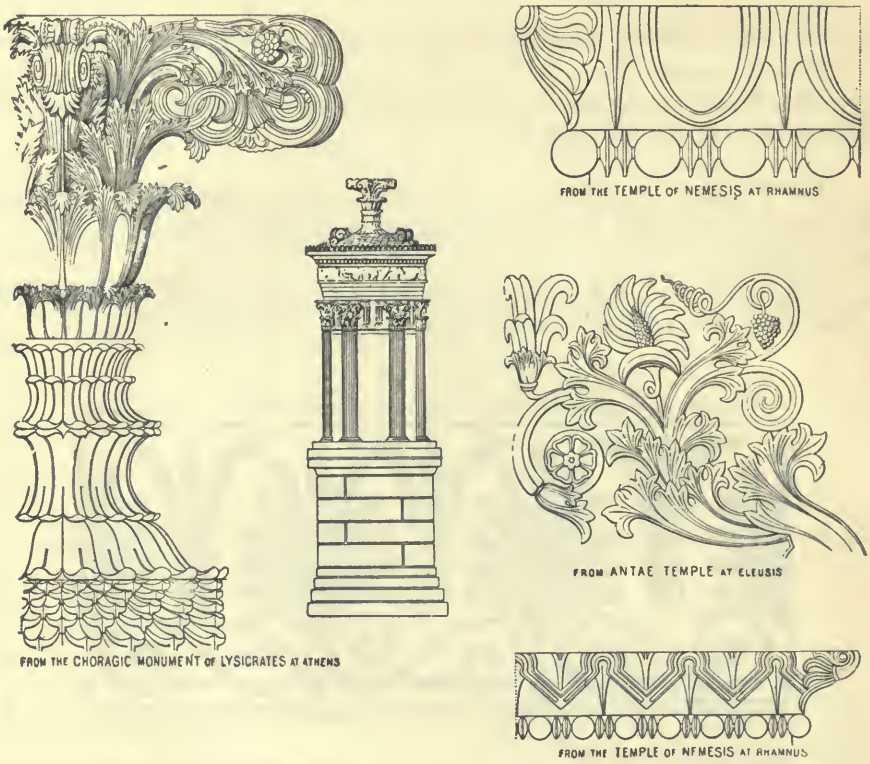
There is great simplicity in the Greek ornamentation. It generally consists of the various elements arranged in simple horizontal series one above another.

The Greek style was both painted and sculptured, and is distinguished by its broad, flat surface, the use of the ellipse, and of right lines.

Example of Greek painted ornament. From ***The Prang Elementary Course in Art Instruction, Book 5.***

NOTE. — *In Goodyear's* **Grammar of the Lotus** *the relation of the elements of the border given above (the anthemion and lily with a modification of the wave-scroll) to the lotus forms in Egyptian and Assyrian ornament and to the Egyptian wave-scroll are given.*

The ornaments were mostly applied to architecture, and were the zigzag, wave scroll, fret, cable moldings, astragals, ogees, channelings, egg moldings, bucranes, guilloche.


FROM THE TEMPLE OF NEMESIS AT RHAMNUS
FROM ANTAE TEMPLE AT ELEUSIS
FROM THE CHORAGIC MONUMENT OF LYSICRATES AT ATHENS
FROM THE TEMPLE OF NEMESIS AT RHAMNUS
FROM THE CHORAGIC MONUMENT OF LYSICRATES
FROM THE TEMPLE OF ERECTHEUS AT ATHENS

Examples of Greek ornament. From ***The Prang Complete Course, Manual Part IV.***

3. ROMAN STYLE.

The acanthus order was very little used by the Greeks, while with the Romans it was a favorite.

The Roman style did not add a single element to the Greek, but elaborated the established elements with every possible variety of effect, and with all the exuberance and richness of which it was capable, developing some of them into colossal proportions. It is original only in its treatment of Greek materials. Its chief peculiarity is its uniform magnificence.

The only distinct Roman order is the *composite*, which implies the three Greek orders; the echinus, the volute, and the acanthus.

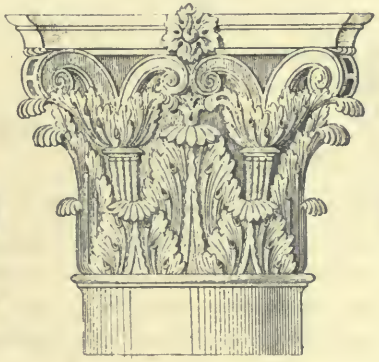
The *shell* and the *arch* may be considered new elements in ornament.

The Roman characteristics are the elements most rarely used among the Greeks.

The acanthus and the scroll, in every form except the capitals, are peculiarly Roman.

Roman buildings are more massive than Greek, as well as bolder in their details. Their curves are much fuller, the Romans using the circular where the Greeks use the elliptic.

Acanthus Rosette.



Corinthian Capital.

Acanthus Rosette.

Examples of Roman ornament. From ***The Prang Complete Course, Book 9.***

The free introduction of monsters and animals is likewise characteristic of Greek and Roman ornament, particularly of the latter.

The traits of the three ancient styles — Egyptian, Greek, and Roman — are very distinct.

The Egyptian is symbolic, rich, and severe.

The Greek is severe and beautiful.

The Roman is rich and beautiful.

The Roman was a sculptured style, distinguished by the use of the circle. Circular arches mark the architecture. The decorations show continuous growth.

Roman ornament may be regarded as an exaggeration of the florid Greek.

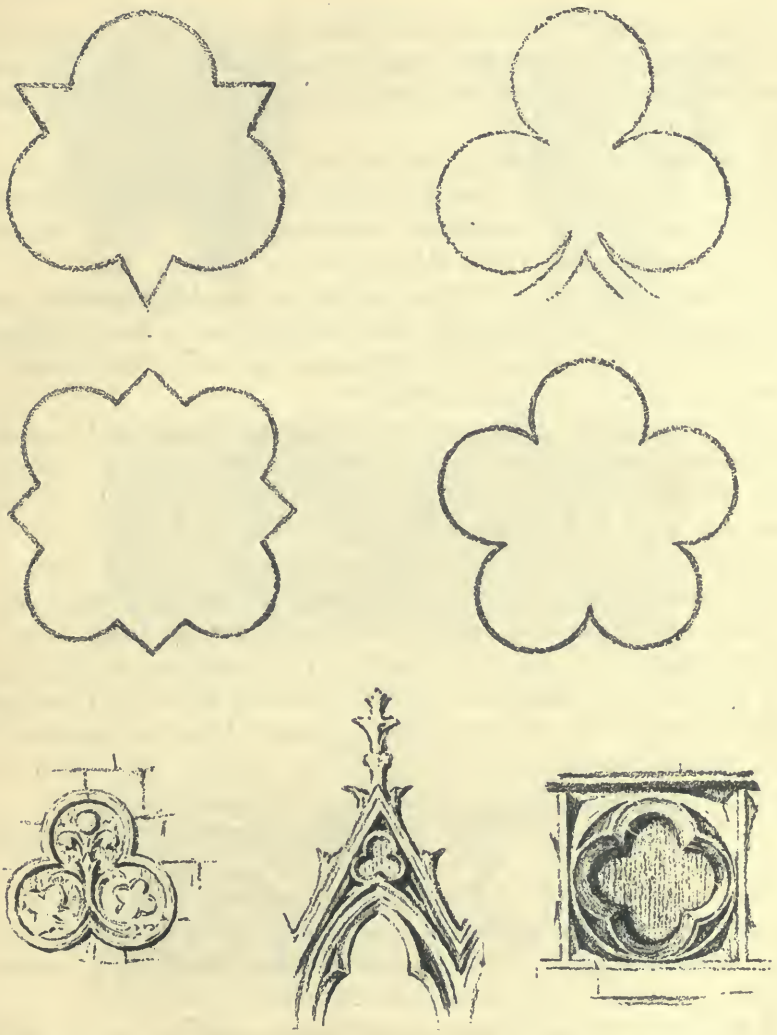
B. MEDIÆVAL STYLES.

1. EARLIER STYLES OF CHRISTIAN ORNAMENT.

The peculiar views of the early Christians did not influence art till the establishment of Christianity by the state. Constantine was among the first champions. During the first and second centuries Christian works of art were limited to symbols, and were never applied as decorations, but as exhortations to faith and piety. All Christian decoration rests on this foundation — the spirit of symbolism prevailing throughout, till the return to the heathen principle of beauty (the esthetic) in the period of the Renaissance.

Early symbols. — Monogram of Christ, lily, cross, serpent, fish, aureole (*vesica piscis*), circle (*nimbus*), hand.

The *circle* or nimbus represented the glory of the head, and forms the element of the trefoil and quatrefoil, so common in Byzantine and Gothic art — the first having reference to the Trinity, the second to the four evangelists as the testimony of Christ, and to the cross, at the extremities of which we often find four circles, besides the circle in the center which represents the Lord.



Examples of symbols used as ornament. *From* ***The Prang Elementary Course in Art Instruction, Book 4.***

Thus, figures or combinations of three, four, or five circles are common in mediæval art, and have sacred significations. Many crosses are composed entirely of five circles as principals, or are prominently decorated with them.

In crosses composed simply of five circles, the center circle has reference to our Lord, and the other four to the evangelists. Occasionally the symbolic images of the evangelists — the angel, the lion, the ox, and the eagle — are represented within these circles.

The *lily* or *fleur-de-lis* is the emblem of the Virgin and of purity. It is as common in Christian decoration as the lotus in that of Egypt.

The *serpent* figures largely in Byzantine art, as the instrument of the fall, and as a type of the redemption.

The *cross* planted on the serpent is found sculptured on Mount Athos. The cross surrounded by the so-called runic knot is only a Scandinavian version of the original Byzantine image — the crushed snake curling around the stem of the avenging cross. The cross with two scrolls at the foot of it, typifying the snake, is another form of the same.

The *hand* is also a characteristic element of early Christian art.

There is a distinction between the Greek and the Latin form. The Greek symbolizes our Lord, expressing His monogram by placing the thumb on the third finger, and slightly curving the second and fourth. The Latin displays the thumb, the first and second fingers extended. The Roman prelate blesses in the name of the Trinity; the Greek, in the name of our Lord.

The dome has its reference to the vault of heaven and the glorification of our Lord.

The terms Byzantine and Romanesque are almost synonymous. The wider significance of the Romanesque is found in the earlier Christian round arch in contradistinction to the Gothic or later pointed arch varieties of the north.

If any style can be distinguished by the exclusive title of Christian art, it is the Byzantine.

NOTE. — *The Byzantine is the eastern and the Romanesque the western European expression in ornament, each influenced by local traditional expression.*

BYZANTINE.

St. Sophia, Constantinople.

ROMANESQUE.

Cathedral, Limburg on the Lahn.

BYZANTINE.

From Southern Germany, XII. Century.

ROMANESQUE.

From Southern Germany, XI. Century.

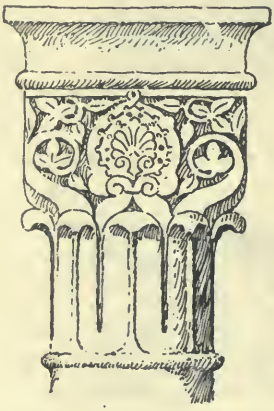
Examples of Byzantine and Romanesque ornament. From ***The Prang Complete Course, Book 9.***

2. SARACENIC ORNAMENT.

The Arabs had no art or artists of their own; they came from their deserts with no more taste or knowledge of such matters than a mere love of finery could give them. They could not but be struck by the gorgeous display of cities like Damascus, which fell into their hands in 634 A.D. The Byzantine artists were pressed into the service of the Arabian califs, and were ordered to raise rich mosques and palaces. The results were seen in Damascus, Cairo, and Cordova.

The conditions of the new Mohammedan law were stringent; in endless designs in mosaic, marquetry, stucco, there was to be no image of a living thing, vegetable or animal.

This led to a very distinctive style of decoration: vegetable forms were now excluded for the first time; ordinary forms from the classic periods, with geometric symmetry, formed the most abundant material. Mere curves, angles, or interlacings constituted the chief burden of a



From the Court of the Lions.

From the Court of the Lions.

Examples of Saracenic capitals. From ***The Prang Complete Course, Book 10.***

design distinguished only by a variety of color. Although flowers were not directly admitted, the great mass of minor detail was composed of flower forms disguised, e.g. the Alhambra. Still no actual flower ever occurs as the exclusion of all natural images is the foundation of the style in its purity. The omission of the *crescent* in Saracenic or Mohammedan work generally is worthy of notice. It is not to be found in any early work. As it now appears in the mosques of Constantinople, it seems to be simply the trophy of the conquest of the Greek capital, the ancient Byzantium, of which it was the symbol. Constantinople was not captured till 1453 A.D.

Characteristics. — Ogee, crescent, scalloped arches, pointed arch, round Romanesque arch.

The Saracenic was the period of gorgeous diapers. The custom of decorating the entire surface of apartments was most favorable to the development of this class of design.

The Alhambra displays endless specimens, all in relief, and enriched with gold and color, chiefly blue and red. The Genoa damask, the Arras tapestries, and modern paper hangings are all imitations of these Saracenic wall diapers. The very word *damask* means Damascus work. Damascus is still famous for its textile fabrics in pure Saracenic taste, and it produces a great variety of patterns in silk and in cotton, the designs of which are chiefly stripes and inscriptions, good wishes and pious sentences. (This style has of late found its way into railway carriages, in which the initials of the company are worked as an ornament, right, left, and upside down.) In the Alhambra all the Arabian features are preserved except the scroll and anthemion.

Examples of Saracenic ornament. From ***The Prang Complete Course, Book 10.***

The Saracenic is distinguished for its geometric tracery, strapwork, inscriptions, and wonderful coloring.

It has been said by a competent judge that "Every principle which we can derive from the study of the ornamental art of other nations is not only present here, but was more universally and truly obeyed by the Moors than by any other people."

It has also been said that there are really but three pure styles, all others being derived from them, viz.: Egyptian, Greek, Saracenic.

3. GOTHIC ORNAMENT.

This style grew out of the Byzantine, and flourished chiefly on the Rhine, in the north of France and in England. Salisbury cathedral, A.D. 1221, and the Cologne cathedral, A.D 1322, are characteristic specimens. It became quite extinct in England in the sixteenth century. This catastrophe was the result of the Reformation.

England has the seven varieties of Gothic architecture: —

1. Saxon or simple round arch, Romanesque.
2. Round Norman (zigzag).
3. Sharp Norman (Henry II.).
4. Early English Gothic (Henry III.).
5. Decorated Gothic (the Edwards).
6. Perpendicular Gothic (Henry VII.).
7. Debased perpendicular (Henry VIII.).

There are not many matters on which people have been more deluded of late years than on the subject of the nationality and of the Christianity of Gothic architecture.

As regards Christianity of style the most Christian architecture is that of the Mohammedan mosques, which owe their forms to the early Christian symbols as developed by the Byzantine Greeks.

The general characteristics of the Gothic, as an architectural style, are these: It is essentially pointed or vertical, and, in its detail, is geo-

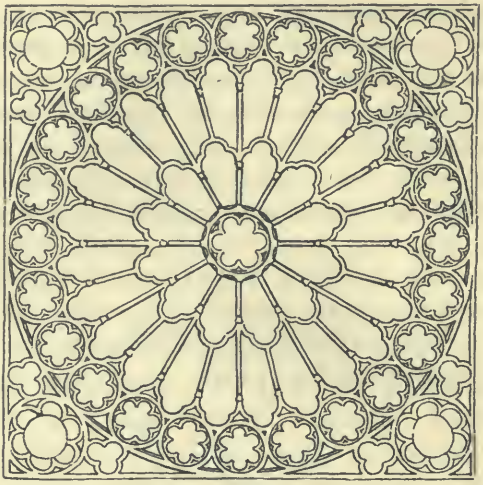
metric, — in its window tracings, in its openings, in its clusters of shafts and bases, and in its suits of moldings, — but it is geometric in its construction, or in its form only, not in its spirit or motive.

Climate has had much to do with the peculiar development of the Gothic. It has flourished only in cold regions subject to much rain and snow. A Gothic church frequently looks like a fortification against the weather, with its high pitched roof, solid buttresses, narrow doors and windows.

The spire is a common feature of the Gothic. The spire and the tower doubtless owe their development as much to use as to ornament. In early times they were landmarks, performing other useful services besides that of indicating the locality of the church, or of securing the elevation of its bells.

Notre Dame, Paris.

From ***The Prang Complete Course, Manual Part VII.***, *and from* ***The Prang Note-Book Illustrations.***



From the Abbey of St. Denis.

From Bayeux.

From Rheims.

Examples of Gothic tracery and of Gothic capitals. From ***The Prang Complete Course, Book 10.***

Ornamentally, the Gothic is the geometric and pointed element elaborated to its utmost. Its only peculiarities are in the combination of detail in its decorations, the conventional and the geometric prevailing at first, and afterward these combined with the elaboration of natural objects.

The Byzantines never did this; the Gothic vesicas, trefoils, quatrefoils, cinquefoils, and geometric varieties are infinite. Early English Gothic presents the following characteristics: mullions instead of piers, windows of several lights, flying buttresses, crocketed pinnacles, complicated moldings, clustered columns, round capitals, an extensive application of foliage, with the trefoil leaf. The dog-tooth molding was also another characteristic; in its original form it was a simple vesica cross, but being contracted to fill hollows, it assumed its present form in the early Plantagenet period.

It is the geometric tracery which stamps a design as Gothic. Examples: Tudor-flower, fleur-de-lis, crocket leaf, trefoil, vine scroll, etc.

In this style Norman and classic ornament are not admissible; also tropical plants would be inconsistent.

C. MODERN STYLE.

RENAISSANCE ORNAMENT.

This name implies the revival of art or its rebirth. It was the revival of the classic order of architecture, the ancient art of Greece and Rome in the place of the Middle Age styles. The essence of all Middle Age art was symbolism, and the transition from symbolism to the unalloyed principles of beauty is the great feature of the revival. Art was wholly separated from religion in the Renaissance, but this transition was developed gradually.

In Italy the change first began about the year 1300. This was in some degree owing to the crusades, but more specially to the Latin conquest of Constantinople in 1204, which displayed many treasures of ancient art to the Venetians. Four ancient bronze horses, a Christian

trophy of this Venetian crusade, still adorn the façade of St. Mark's. The beginning of the Renaissance period may be known as the *trecento*, the more finished as the *cinquecento*, and the latest, the most modern, as the *Louis Quatorze*.

FROM THE MUNICIPAL PALACE, BRESCIA, ITALY.
FORMENTONE, (1508)

Example of Renaissance ornament. From ***Parallels of Historic Ornament****, sheet of Renaissance style.*

During the past few years Renaissance ornament has been used quite generally on buildings, and in wall paper, chintz, and drapery designs. It is easy, therefore, for pupils to get a general observation of Renaissance ornament in their homes and along the street. This kind of observation, while it may not give the pupils anything that can be drawn, stimulates the interest in ornament and fixes habits of comparing the examples given with those found generally. Such comparison should lead to good judgment not only as to the styles of ornament, but also as to the value of the examples of given styles.

BOOKS, MANUALS, AND MATERIALS FOR CARRYING OUT THE WORK IN DECORATION AND HISTORIC ORNAMENT.

Methods of presenting the work in geometric design to pupils will be found in the following books:—

THE AMERICAN TEXT BOOKS OF ART EDUCATION, Books X., XI.
THE PRANG BOOK OF GEOMETRIC PROBLEMS.

For the work in the conventionalization of plant forms and in the making of designs the following books will furnish what is needed:—

THE PRANG COMPLETE COURSE, MANUALS Parts IV. and VII.

For the work in historic ornament the following books, etc., will furnish abundant material:—

THE PRANG COMPLETE COURSE, Books 7–10 inclusive and MANUAL, Part IV.

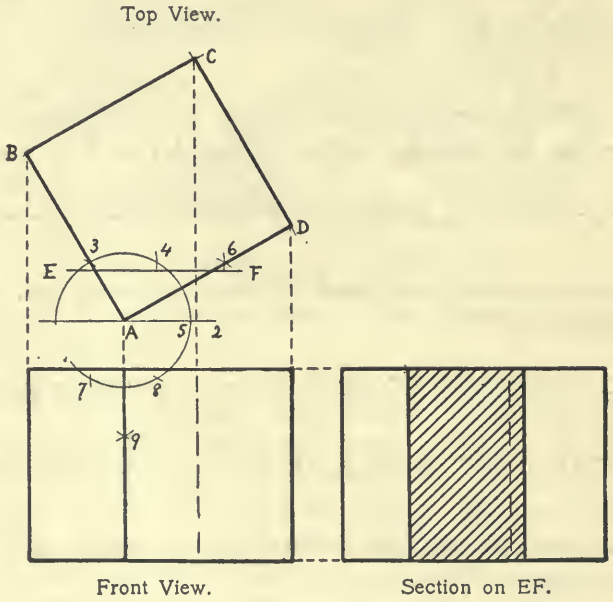
THE AMERICAN TEXT BOOKS OF ART EDUCATION, Books XIII. and XIV.

THE PARALLELS OF HISTORIC ORNAMENT, without color, in all the Historic Styles.

NOTE. — **The Parallels of Historic Ornament** give the equivalent of the sheets of **Owen Jones' Grammar of Ornament** in variety of figures, etc. They are published with and without color. They may be had of THE PRANG EDUCATIONAL COMPANY.

C. CONSTRUCTION, OR GEOMETRIC AND WORKING DRAWINGS.

Geometric and working drawings. — Working drawings of type forms, and objects based on them in oblique positions; working drawings of combinations of two or more objects in simple positions; construction of ellipses; oblique sections of cylinders, cones, pyramids, and prisms; intersections of cylindric surfaces, and the development of the intersecting surfaces; development of oblique sections of cones, pyramids, and prisms; isometric projections. (See Plates 28–32 of ***Syllabus No. 8.***)



Example of views of a solid oblique to the vertical plane, and with a sectional view. From ***The Prang Complete Course, Manual Part VI.***

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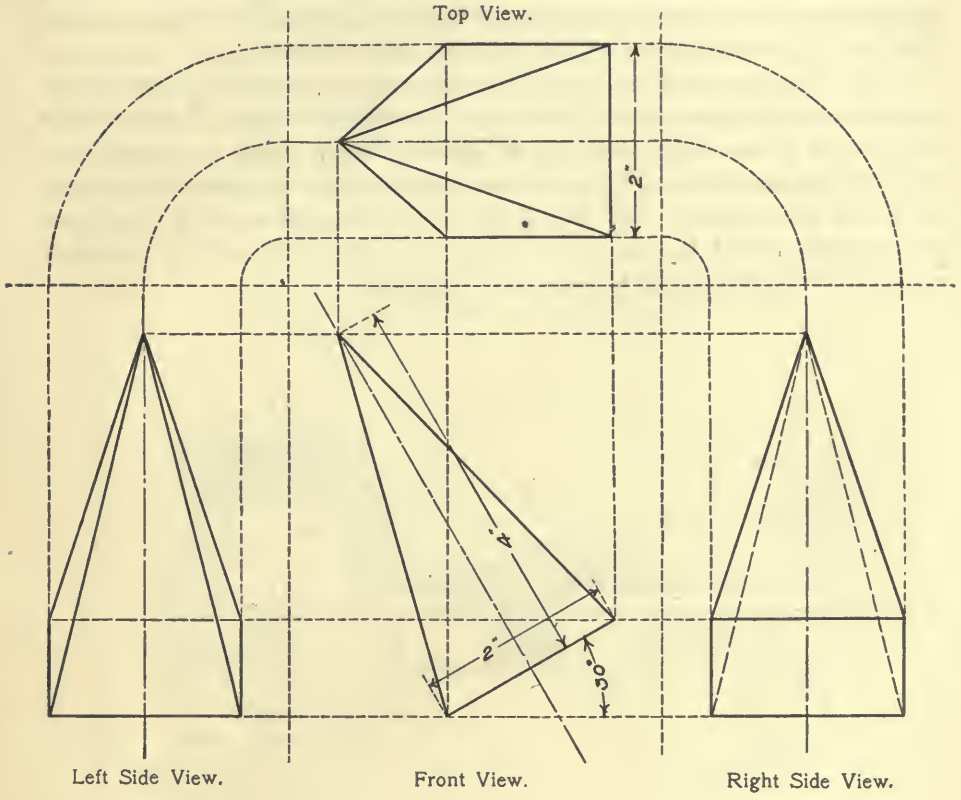
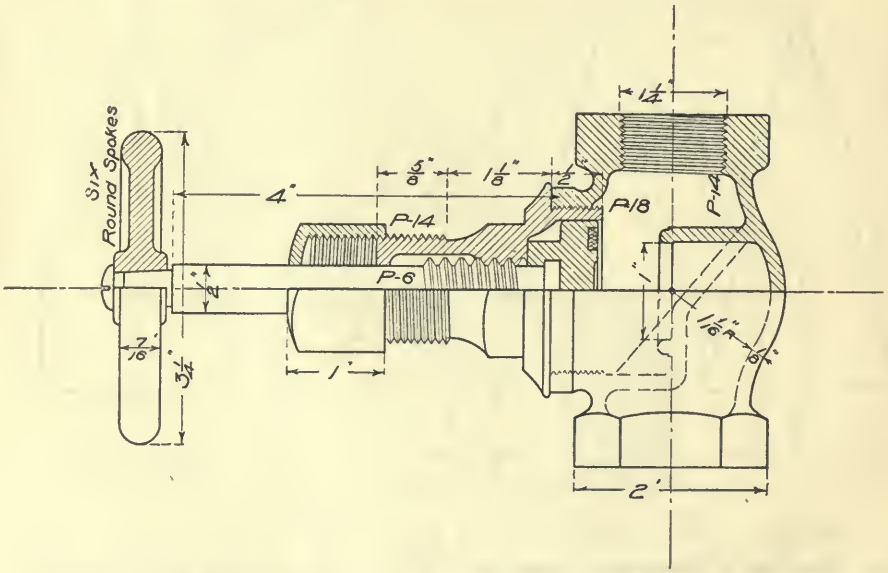
The drawing on p. 102 shows the object oblique to the vertical plane, the one below shows the object oblique to the ground plane. A still more difficult problem may be made by placing an object oblique to both the vertical and the ground plane.



Example of the projection of a solid oblique to the ground plane. From ***Rouillion's Mechanical Drawing****, published by The Prang Educational Company.*

The drawing given on this page is an example of the work in one of the most practical lines of mechanical drawing. This class of drawing fits directly for work in draughting rooms. The difficulty in the making of this kind of drawing does not lie in the execution, but in the observation of the details. Pupils are, however, generally interested in the structure and action of machinery, and through their interest in it are easily led to the study of its facts and to the expression of these facts in working drawings.

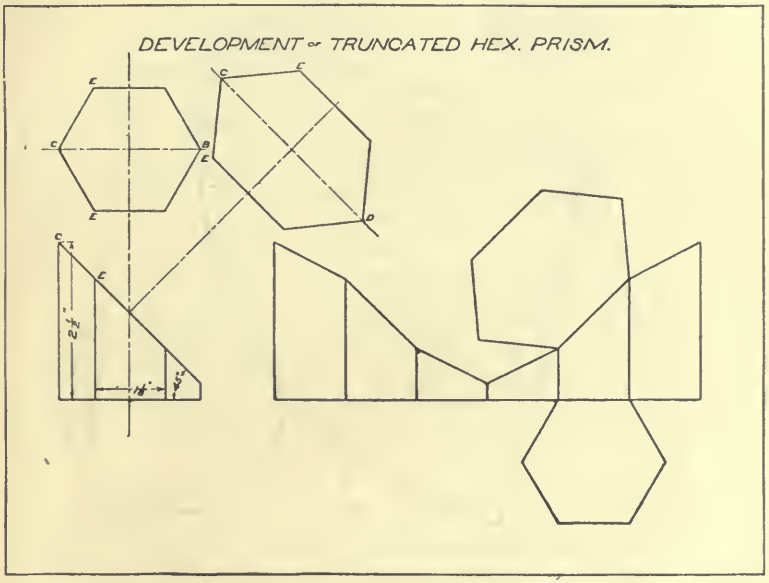
The drawing given is valuable as showing a considerable number of conventions, and would be useful for actual study by a class. The difference in direction of the section lines is to indicate that the parts represented are of different materials. If pupils are good observers, the questions arising from the observation of this and other new points as a result of their own investigation would lead to a clearer understanding of working drawings than could be arrived at by any other means.



Example of Machine Detail. From **Rouillion's Mechanical Drawing.**

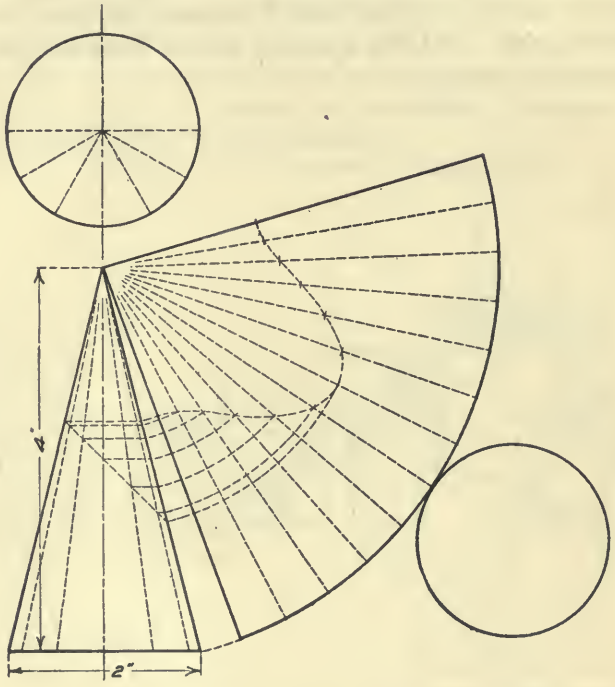
Surface developments and patterns.

The illustration on this page belongs to another practical line of mechanical drawing — that of pattern making. This drawing, while it gives a pattern, belongs to the preliminary exercises in which the principles are developed that are afterward applied in the solution of the more difficult problems of actual pattern making. Such drawings as these should, therefore, be considered a means, first, of securing the observation of all objects in the making of which surface development is a preliminary step, and, second, as fixing the principles upon which a proper understanding of the subject is dependent. Work in this subject is purely geometric, and is valuable, therefore, as a means of mathematical training. This work gives a kind of manual training possible under any school conditions.



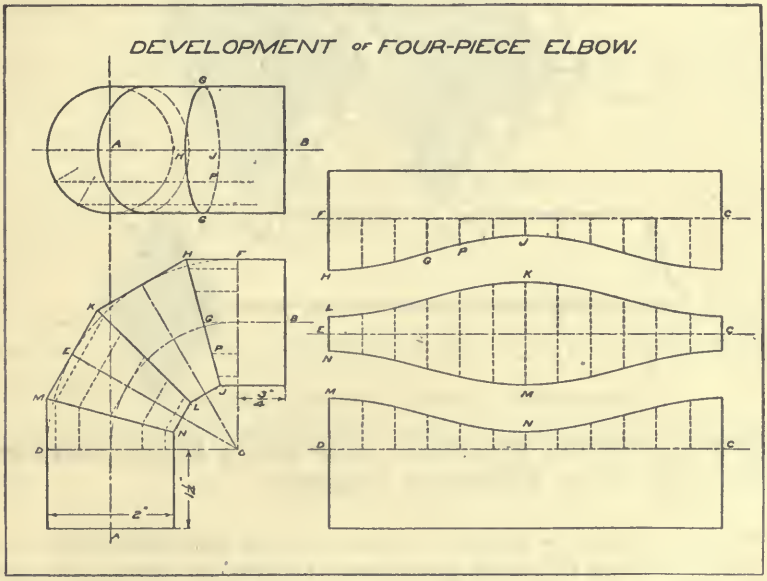
Example of oblique section of prism, with surface development of frustum. From ***Rouillion's Mechanical Drawing.***

The illustrations in surface development have not been selected with a view to giving all the consecutive steps, but rather to show the main features in a course in this subject such as is suggested by the Regent's requirements. The principles involved in developing the surface of the frustum of the cone enter into an extensive and useful line of pattern making, and this exercise may, therefore, be counted as a main feature in the working out of the subject of surface development.



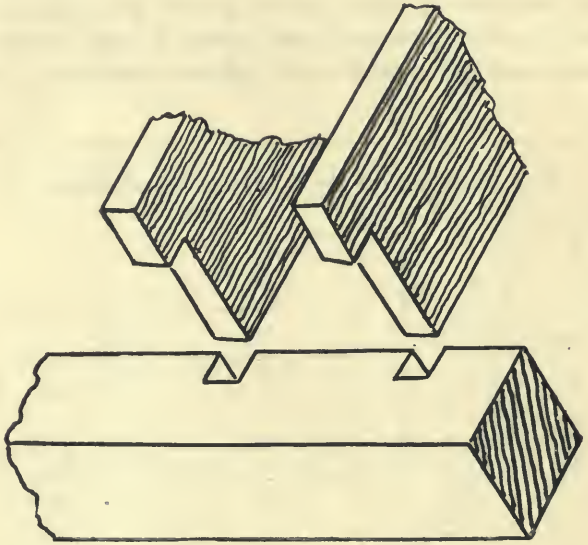
Example of oblique section of cone, with surface development of frustum. From ***Rouillion's Mechanical Drawing.***

The intersection of surfaces is another main feature in pattern making. The apparatus for heating and ventilating the school building may well be studied with interest by pupils in connection with this subject, both because of its character and because the manufacture of such apparatus is a great industry. The hot and cold air shafts are either "intersections of cylindric surfaces" or intersections of the surfaces of square or oblong prisms. "Elbows" are often very ingeniously made in air shafts in order to carry the shaft around pillars, under staircases, etc. In these elbows will be found a great variety of intersections which earnest pupils will enjoy studying out. The foundation for intelligent work can easily be laid by the use of such materials as may readily be found in the different parts of a school building.



Application of intersection of cylindric surfaces in a four-piece elbow. From ***Rouillion's Mechanical Drawing.***

An isometric projection is one in which the object represented is assumed to be inscribed in a cube, one of whose diagonals is perpendicular to the plane on which the projection is made. Those edges of the object which are parallel to the edges of the assumed cube will be equally foreshortened in the projection. Such drawings may therefore be used as working drawings, while they give, at the same time, a picture (somewhat distorted) of the object. These drawings are extensively used by carpenters and masons.



Example of isometric projection. From **Ware's Building Construction,** *published by The Prang Educational Company.*

NOTE. — *The object of isometric projection is to give a pictorial effect in mechanical drawings while preserving the relative proportions of the parts of an object so that the drawings may be made to scale and measurements readily taken from them. A simple and clear presentation of isometric projection may be found in* **Anthony's Mechanical Drawing,** *which will doubtless give material for all necessary preparation in this subject.*

BOOKS, MANUALS, AND MATERIALS FOR CARRYING OUT THE WORK IN GEOMETRIC AND WORKING DRAWINGS.

Methods of instructing pupils in geometric problems and in projection in the third angle (bringing the top view above the front view) will be found in the following books and Manuals: —

THE PRANG COMPLETE COURSE, Books 7–10 inclusive, and the accompanying MANUALS, Parts IV., VI., and VII. The glossary of terms in Manual Part IV. is a valuable aid to teachers.

THE PRANG BOOK OF GEOMETRIC PROBLEMS.

ROUILLION'S MECHANICAL DRAWING.

If projection in the first angle (bringing the plan or top view below the elevation or front view) is preferred, the following books will give the necessary instruction: —

THE AMERICAN TEXT BOOKS OF ART EDUCATION, Books XIII. and XIV.

A SUGGESTED COURSE

OF ONE HUNDRED LESSONS TO PREPARE FOR THE REGENTS' EXAMINATION IN ADVANCED DRAWING FOR THE SECOND YEAR ACADEMIC CERTIFICATE.

Thirty Lessons in pictorial drawing, distributed as follows : —

Ten Lessons in mechanical perspective.

Ten Lessons in freehand perspective from interesting objects — singly and in groups — in outline, and in light and shade.

Five Lessons in copying from good examples of light and shade.

Five Lessons in sketching — from the window, or out of doors.

Thirty Lessons in historic ornament and decorative design, distributed as follows : —

Ten Lessons in the study of styles of historic ornament, with drawing from good examples of all the styles. The memorizing of good examples of each style is most valuable.

Five Lessons in the laying out of designs. (Frank G. Jackson's *Elements of Design*, and Lewis F. Day's *Analysis of Ornament* are valuable aids in this work.) This work would be geometric in character, a framework upon which to apply historic motives and decorative forms derived from plants by conventionalization.

Five Lessons in the adaptation of historic motives to the making of new designs. The preceding work forms a basis for this adaptation.

Ten Lessons in the conventionalization of plant forms, and the adaptation of the conventionalized form to geometric enclosing figures, and to leading lines laid out on a geometric plan. See examples, pp. 31 and 34 of this manual.

Thirty Lessons in geometric and working drawings, distributed as follows:

Five Lessons in geometric problems, including the construction of ellipses.

Ten Lessons in the drawing of views of type forms and objects in oblique positions to the vertical and to the ground plane, and in the drawing of combinations of models and objects.

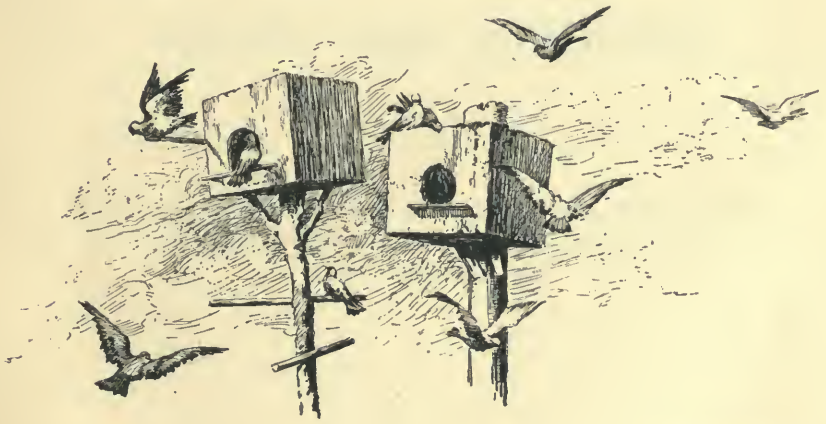
Ten Lessons in the drawing of oblique sections of cylinders, cones, prisms, etc.

Ten Lessons in the development of surfaces of oblique sections of the cylinder and cone, and of prisms and pyramids, and of intersections of cylindric surfaces.

Five Lessons in isometric projection.

Ten Lessons in a general review of all the subjects.

NOTE. — The materials for carrying out this work have been given at the end of each subject division, in order to make the special application of the material to the subject in hand better understood.



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SUGGESTIONS

FOR THE

PREPARATION OF TEACHERS AND TRAINING CLASSES
TO MEET THE UNIFORM EXAMINATIONS
IN DRAWING

FOR

FIRST, SECOND, AND THIRD GRADE CERTIFICATES

AND FOR

TRAINING CLASS CERTIFICATES

BASED ON THE SYLLABUS ISSUED BY THE DEPARTMENT
OF PUBLIC INSTRUCTION IN THE STATE OF
NEW YORK IN 1896

"Mind, which grows . . . like a spirit, by mysterious contact of spirit; Thought kindling itself at the fire of living thought." — CARLYLE.

"For him fruits and silks and skies glow with color; morning, noon, and twilight produce different atmospheres; mountains, buildings, human beings flow in graceful lines; the sunlight falls like Danaë's golden shower; the moonlight sleeps in silver across the land and sea." — VAN DYKE.

INTRODUCTION.

In the preface of the SYLLABUS OF DRAWING issued by the **Department of Public Instruction** in the **State of New York**, the following statement is made : —

"The following lessons in drawing are intended as a guide for use in teachers' training classes, and teachers' institutes throughout the State. They are designed to present in order the most important elementary principles underlying the study of the subject to those who are preparing to teach. The more advanced subjects of art education are omitted. For the treatment of advanced drawing, decoration, historic ornament, and a more elaborate presentation of pictorial drawing, the teachers are referred to the Regents' Syllabus."

It will be seen from this that the work in this Department runs parallel with that of the Department of Regents, and that any scheme of work which will prepare for the Regents' Examinations will also prepare for the Uniform Examinations, except in Color and in Illustrative Drawing.

While Illustrative Drawing is not given in the syllabus issued by the Department of Public Instruction, the examinations often require the illustration of a stanza or a line of poetry. It seems well, therefore, to take up this subject in the preparation for the Uniform Examinations.

In the following pages the purpose is to give the subjects required in the **Uniform Examinations** and **Examinations in Training Classes** *not given* in the preceding work on the preparation for **Regents' Examinations.**

REQUIREMENTS FOR THE PREPARATION FOR UNIFORM EXAMINATIONS.

Introductory note. — *The following statements of requirements in Color are taken from* ***Drawing for Use in Teachers' Institutes and Training Classes****, issued by the Department of Public Instruction of the State of New York in 1896. All illustrations are taken from the Prang publications.*

I. THE STUDY OF COLOR.

A consideration of the value of color study, the selection and recognition of the six positive (or standard) spectrum colors, twelve intermediate hues of the spectrum, and the naming and recognition of the same.

The value of color study : —

From an esthetic, a utilitarian, and an educational standpoint, and particularly in connection with the study of form.

"The effect of such a training (a well-developed and carefully trained color sense) on the higher development of our people . . . would be of the greatest value." — HENRY LEFAVOUR.

"There is scarcely any subject that has so many practical and scientific aspects as the subject of color. Its great importance in the arts, and its contribution to the enjoyment of life, are matched by the multiplicity of problems in the physical and philosophical sciences with which it is connected." — HENRY LEFAVOUR.

In vision, color and form are the principal factors; in truth, they are all, if we consider light and shade as a part of color. Outline, so called,

is simply the edge of one mass of color against another; or, in other words, the outline is defined by the juxtaposition of colors, or by one color being relieved against another.

The six positive spectrum colors : —

There have been many disputes concerning standards of color. It is now generally accepted that the solar spectrum, "nature's standard of color," must be ours. From the numerous colors composing the spectrum, the following six, viz., red, orange, yellow, green, blue, and violet, are selected as the positive or principal spectrum colors.

Warm and cool colors : —

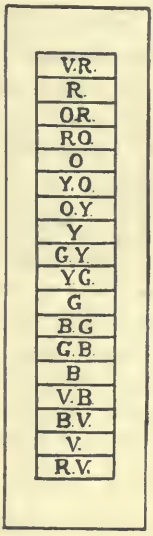
Red, orange, and yellow, and combinations of the same, are classed as warm colors; blue, green, and violet are classed as cool colors.

Hues : —

The space in the spectrum between pure red and pure orange is occupied by a series of colors graded from red to orange, the red predominating at first, and gradually being dominated by the orange.

Any color thus produced by blending two positive spectrum colors is a hue of the predominating positive. In naming the hue, the names of both positive colors are given, the name of the modifying color being used as an adjective modifier of the name of the predominating color.

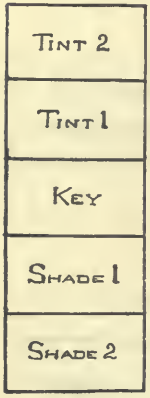
Numerous hues are found intermediate between each pair of adjacent positives, and of these hues two only have been selected for use in elementary color study. See illustration for arrangement.



The colors of the spectrum are supposed to complete a circuit, and, in the chart, are shown as separated midway between red and violet. The circuit can be shown by placing the two ends of the chart together in cylindrical form.

The study of tints and shades, and their arrangement in scales; also of neutrals, broken colors, and grays.

A **tint** is any color modified by increased light, or blended with white.



A **shade** is any color modified by diminished light, by shadow, or blended with black.

A **color scale** is a regular series of colors composed of some central color graduating by a succession of steps to a light tint on one side, and to a deep shade on the other.

The **key** of a color scale is the central color which is modified to produce the various tints and shades of that scale.

NOTE. — For convenience, the tint nearest the key is called the first tint, and the next the second tint; the shade nearest the key is the first shade, and the next the second shade. The scale may be extended in either direction, to white or to black; but, ordinarily, the key with two tints and two shades will sufficiently illustrate the scale.

Black and white are known as **neutrals**. By many, silver and gold are also placed in this class.

Theoretically, pure black and pure white, when blended, will produce neutral gray. Practically, neutral gray does not exist.

A **broken color** is any color modified by gray.

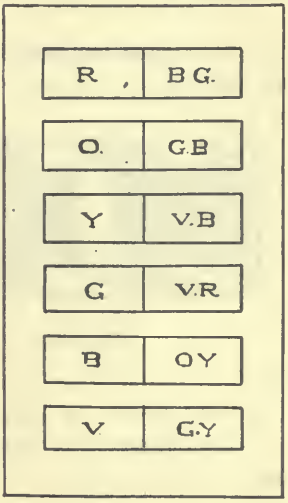
Other grays. — If in a broken color the gray be continually increased, and the color reduced in proportion, a point will be reached when the gray will predominate, and the broken color will become a colored gray. When such gray is composed in part of the warm colors, it is called a warm gray; when composed in part of the cool colors, a cool gray.

NOTE. — A broken color may be produced by placing a tint in shadow, or a shade in high light.

The study of complementary colors.

Two colors which, when combined in correct proportions and under proper conditions, will produce white or gray, are said to be **complementary** to each other.

The complementaries of the six positives, as approximated in the best material available for school use, are as follows: red and blue green; orange and green blue; yellow and violet blue; green and violet red; blue and orange yellow; violet and green yellow.



Experiments for finding the complementary color.

1. The first clue to the complementary of a given color may be obtained in the following manner: —

Gaze intently for some seconds upon a given color, say red, placed against a white background. When the eye is fatigued with this color, suddenly remove the red or cover it with a white surface. There will then appear in the place of the red, or upon the white surface, a faint after image, of the same size and shape as the original red, which is called the accidental color, and which is supposed to be identical with the complementary color. Though the image is faint, it is sufficient to furnish a clue to the composition of this complementary color, in this case a combination of green and blue, which may be produced more exactly, and tested on the color top.

The study of harmony in color.

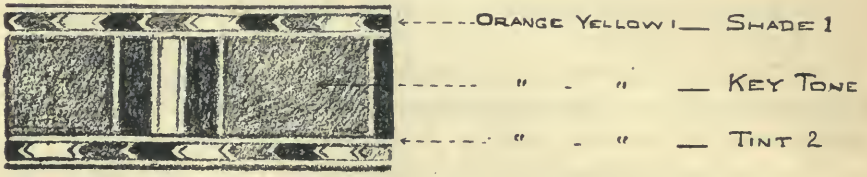
For the study of harmony in color, the following are deemed essential and sufficient: — *contrasted harmony*, *dominant harmony*, *complementary harmony*, *and analogous harmony.*

The perfection of any one of these harmonies depends upon the excellence of judgment and the nicety of taste of the individual.

NOTE. — *An appreciation of color harmony can be cultivated, in most cases, by means of much observation of good color arrangements and much practice in making color arrangements. To study color in nature as well as in art is an aid to growth in the appreciation of color.*

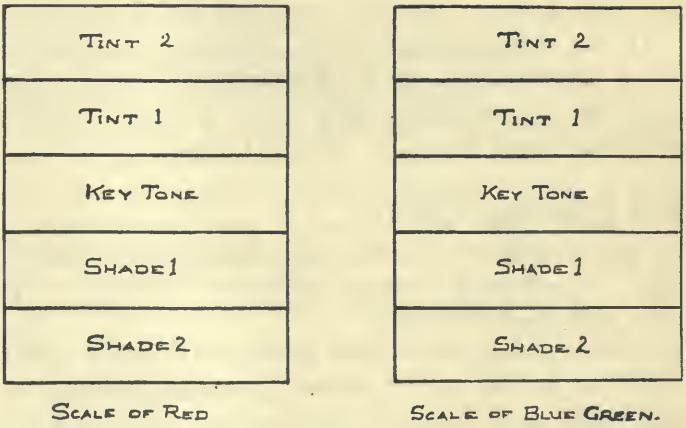
Contrasted harmony is the effect produced by placing any color in contrast with gray.

Dominant harmony is the effect produced by combining different parts of the same color scale.



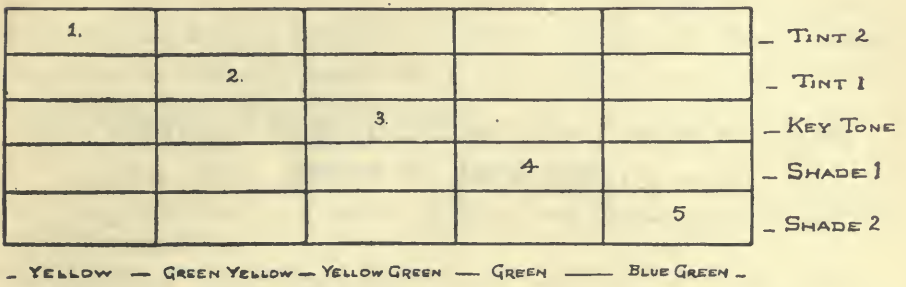
Example of dominant harmony in tones of red.

Complementary harmony is the effect produced by combining complementary colors.



Tones of the red scale may be combined with tones of the blue green scale, and harmony will be produced.

Analogous harmony is the effect produced by combining parts of adjacent color scales, selected in the order of the spectrum.



If the tones marked 1, 2, 3, 4, 5 *are combined, the result will be analogous harmony. Other tones chosen from adjacent scales may also be combined to produce analogous harmony.*

"Also, that cloistered wall was compassed in
With pillars wonderful for work and hue;
This one, a palm stem; that, papyrus, thin;
Yonder, in stone, lotuses pink and blue."

Edwin Arnold.

BOOKS, MANUALS, AND MATERIALS FOR CARRYING OUT THE WORK IN COLOR.

For the study of color in a unit of eighteen colors, and for the explanation of ***contrasted, dominant, complementary, and analogous harmony,*** *the following books will furnish methods:—*

WHITE'S NEW COURSE IN ART INSTRUCTION, Manuals for Third to Eighth Year inclusive.

For the materials for working out designs to illustrate the different harmonies, see the colored papers accompanying

WHITE'S NEW COURSE IN ART INSTRUCTION, Books 3–8 inclusive.

II. THE STUDY OF THE FACTS OF FORM AND THE REPRESENTATION OF THESE FACTS BY WORKING DRAWINGS.

The following statements of requirements in Form Study and in Geometric and Working Drawings are taken from ***Drawing for Use in Teachers' Institutes and Training Classes,*** *issued by the Department of Public Instruction of the State of New York in 1896.*

Geometric terms. — Point, line, angle, figure, etc. (*For definitions of these terms see the Glossary in* ***The Prang Complete Course Manuals, Parts III. and IV.***)

Geometric solids. — Sphere, ellipsoid, ovoid, etc. (*See pages 19, 20 of this manual for a statement of these solids.*)

Geometric problems. — (*See pages 51 to 53, of this manual for a statement of geometric problems. See also* ***The Prang Book of Geometric Problems.***)

The use of instruments and drawing boards. — (*See pages 48 to 51 of this manual for the description of the use of instruments, etc. See also* ***Rouillion's Mechanical Drawing.***)

Projection. — (*See pages 54 to 59 of this manual for suggestions in this subject, also page 117 for a list of books containing matter upon this subject.*)

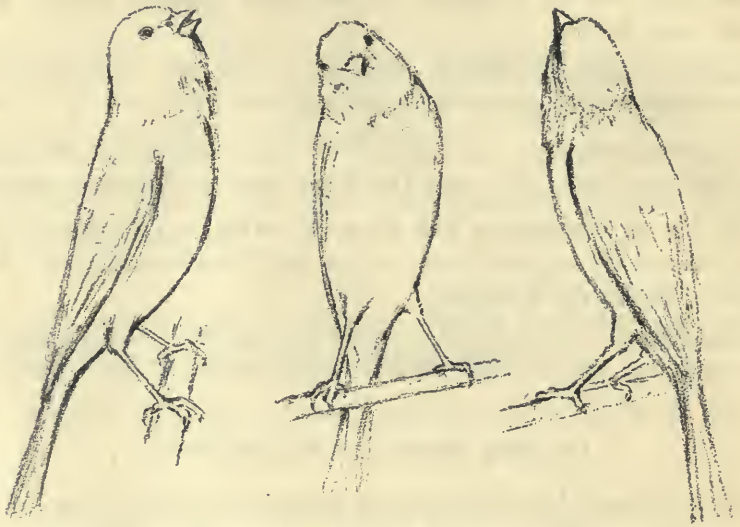
III. THE STUDY OF PERSPECTIVE.

The statements concerning theoretic perspective found on pages 75 to 82 of this manual apply to the requirements in this subject found in ***Drawing for Use of Teachers' Institutes and Training Classes,*** *issued by the Department of Public Instruction in the State of New York in 1896.*

The above-named Manual gives very full statements of method and all necessary definitions and illustrations for the use of teachers in presenting the subject of perspective with sufficient thoroughness to prepare for the examinations for Teachers' and Training Class Certificates.

ILLUSTRATIVE DRAWING.

The following illustrative drawings will serve to give an idea of the general trend of this subject in the public schools. It is intended to show the use of illustrative work in nature study (Studies of Birds), historic houses (Washington's Headquarters), and in the illustration of classic stories (Pandora, The Princess).



Studies of Birds.

From ***The Prang Elementary Course in Art Instruction, Book 4.***

NOTE. — *The study of birds as a subject for expression by drawing is not so difficult as to be excluded from the general list of subjects usually classed as "nature study," and intended for illustrative drawing. Birds are the delight of children, and what they love they like to observe, to tell about, and to draw.*

HISTORIC BUILDINGS.

NOTE. — *The associations which cluster around the various "headquarters" of Washington are always interesting, and often touchingly beautiful. To lead pupils to the appreciation of the human side of any great character — as Washington — seems more valuable than to labor for more detailed facts in history. There is something in the study of pictures of historic buildings which rouses the imagination and stimulates the interest in all connected with the building. Half the charm in the wonderful legends of King Arthur lies in the mystery connected with the "table" around which the knights gathered. Here the knights were known by full description, but not the place of meeting. In the case of the historic house the order is reversed, the house being the point known, — the individuals to be sought. The picture, then, will rouse just the inquiries desired to bring out the search for the spirit and lives of the men whose deeds made the building it represents famous.*

Washington's Headquarters, Montclair, N.J.

From ***The Prang Elementary Course in Art Instruction, Book 4.***

NOTE. — *C. D. Gibson, whose drawing of Pandora is given below, says the intention is to represent Pandora as earnestly wishing to open the box, but fearing to lift the lid. The same thought is expressed in the following lines: —*

"Yon mysterious chest
Attracts and fascinates me. Would I knew
What there lies hidden! But the oracle
Forbids. Ah me! The secret then is safe.
So would it be if it were in my keeping.
A crowd of shadowy faces from the mirrors
That line these walls are watching me. I dare not
Lift up the lid." — LONGFELLOW.

Pandora.

From **The Prang Elementary Course in Art Instruction, Book 2.**

"Through all the world she followed him."

The Princess.

From ***The Prang Elementary Course in Art Instruction, Book 6.***

BOOKS, MANUALS, AND MATERIALS FOR CARRYING OUT THIS WORK.

Abundant material for a course in illustrative drawing will be found in the following books and Manuals, published by The Prang Educational Company: —

THE PRANG ELEMENTARY COURSE IN ART INSTRUCTION, Books 1–6 inclusive, with accompanying MANUALS.

THE PRANG COMPLETE COURSE, MANUAL Part IV.

BARTHOLOMEW'S SKETCHES — several sets, both elementary and advanced.

WOODBURY'S SKETCHES — two sets.

SUGGESTIONS

FOR THE PREPARATION FOR UNIFORM EXAMINATIONS.

It will be seen, from a careful study of the preceding work of the Regents' Syllabus and of the Manual on Drawing issued by the Department of Public Instruction, that it is necessary to have a knowledge of the following matter in order to meet the Uniform Examinations in the State of New York : —

1. A knowledge of a scheme of eighteen colors in tints and shades, and of certain harmonies to be produced by combining these colors.
2. A knowledge of the type forms named in the Regents' Syllabus No. 8.
3. A knowledge of the pictorial representation of models and objects in outline, and in light and shade.
4. A power to copy sketches of landscapes, houses, etc., in light and shade.
5. A knowledge of mechanical perspective, both parallel and angular.
6. A knowledge of geometric problems.
7. A knowledge of the making of views of models, of sections of models, and of objects.
8. A knowledge of the development of surfaces of models and sections of models.
9. A knowledge of the drawing of ornament, and of the harmonious arrangement of colors in ornament.
10. A knowledge of the styles of historic ornament, and of some examples of each style.

A course of study to prepare for the Uniform Examinations would, therefore, need to include these subjects. Such a course would require one hundred lessons to be sufficiently thorough. A suggested course is given below.

A SUGGESTED COURSE

OF ONE HUNDRED LESSONS TO PREPARE FOR THE UNIFORM EXAMINATION IN DRAWING FOR A FIRST GRADE CERTIFICATE.

Five Lessons in the study of color and color harmonies.

Five Lessons in the recognition of form in models and objects.

Ten Lessons in the pictorial representation of models and objects in outline, and in light and shade.

Five Lessons in the copying of sketches of landscapes, etc.

Fifteen Lessons in mechanical perspective.

Five Lessons in geometric problems.

Fifteen Lessons in the making of views of models, sections of models, and objects.

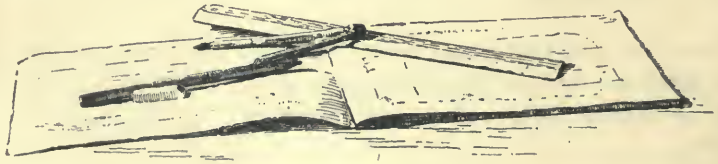
Five Lessons in the development of surfaces of models and sections of models.

Fifteen Lessons in the drawing of ornament, and the harmonious arrangement of color in ornament.

Ten Lessons in historic ornament, including the drawing of examples of each style.

Ten Lessons for general review.

NOTE. — The books, manuals, etc., for use in this work have been suggested with each subject in order.



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